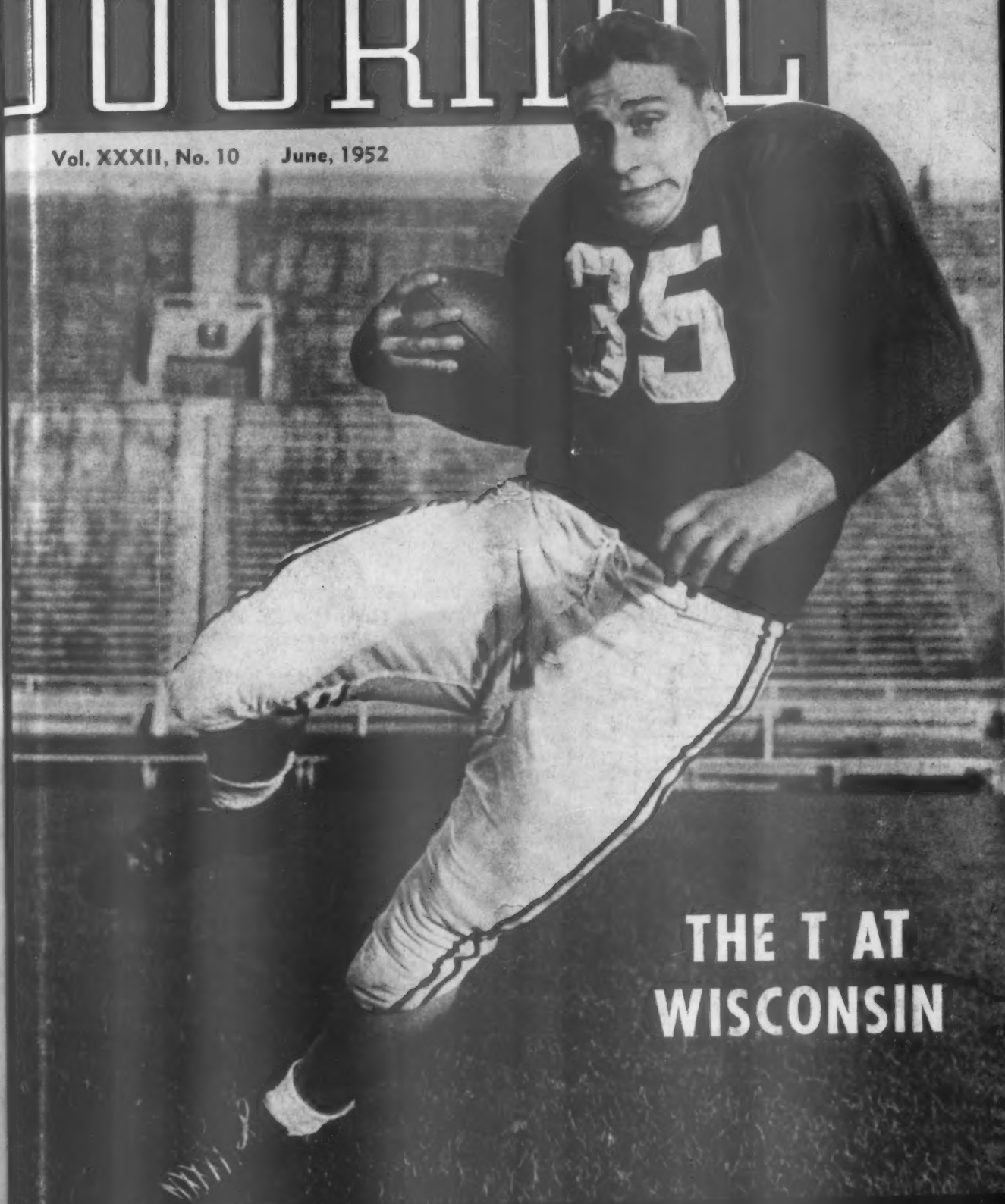


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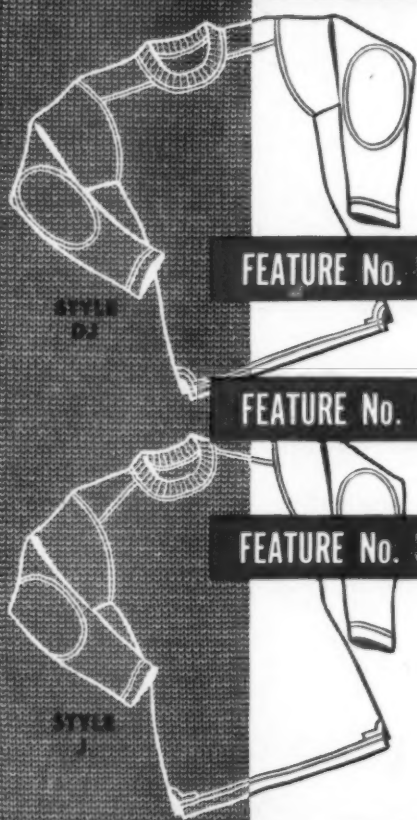
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The ATHLETIC JOURNAL

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Number 10

JUNE, 1952

4 FOOTBALL ARTICLES

WISCONSIN'S T FORMATION 5

Ivan B. Williamson

WISCONSIN'S BACKFIELD PLAY 8

Robert H. Odell

WISCONSIN'S LINE PLAY 9

Milton Brubn

WISCONSIN'S END PLAY 13

Paul R. Shaw

1 ARTICLE ON FACILITIES

A FUNCTIONAL BUILDING FOR PHYSICAL
 EDUCATION, RECREATION, AND
 ATHLETICS 15

Lyle Bennett

1 ARTICLE ON VISUAL AIDS

VISUAL AIDS IN PHYSICAL EDUCATION 18

Theodore P. Bank

1 ARTICLE ON PHYSICAL EDUCATION

SEQUOIA HIGH SCHOOL—THIRTY-ONE YEARS
 OF PHYSICAL EDUCATION 28

Louis E. Means

1 TRACK ARTICLE

OLYMPIC PROSPECTS 32

H. D. Thoreau

6 FEATURES

FROM HERE AND THERE 3

COACHING SCHOOL DIRECTORY 24

NEW ITEMS 42

INDEX TO VOLUME 32 44

EDITORIALS 47

BUYERS GUIDE 47

FRONT COVER ILLUSTRATION

Alan Ameche, Wisconsin's driving fullback will play an important part in Ivy Williamson's Wisconsin T next fall. For a comprehensive insight into this power-packed attack be sure and see pages 5-14.

from here and there



THE latest wrinkle in comfort for baseball players is the paneling in back of the Dodgers dugout. This is not ordinary paneling, but is electrically heated radiant paneling. When the outside temperature is 60 degrees these panels provide a maximum surface temperature of about 115 degrees . . . Since Biggie Munn took over at Michigan State, five of his assistants have moved on to head college coaching positions . . . Comparisons of former years with today always make interesting statistics — take the case of the Iowa basketball tournaments. In the ten years 1923 through 1932 the leading scorer in the final tournament series averaged 35.2 points. In the same period these leading scorers averaged 4.4 fouls against themselves. Of the average of 35.2 points, 9.2 were made by successful free throws; or in other words, the leading scorer was making better than two free throws for every foul he committed. In the years 1942 through 1951 the leading scorer for the tournament averaged 52.2 points of which 14.6 were scored from the free throw line. However, the leading scorer averaged 9.1 fouls against himself, thus scoring only a little better than 1½ free throws for every foul he committed . . . Of the 61 outdoor and indoor track and field records for Michigan State, 7 were made in the 20's, 13 in the 30's, 27 in the 40's, and in only the two years 1950 and 1951, 14 new marks have already gone on the books. It will be noted that in each of the three completed decades the number of marks has doubled.

• • •

IT may be that we are imagining this, but it seems as if more "old timers" are retiring this year than in any previous year. Among the latest is George Small who has coached the University of Maine tennis team for the past 22 years . . . Jud Hall who has been assistant coach for the Columbia 150 pound team goes to Wilson Borough, Pa., High School . . . Don Burson who assisted Bob Voigts at Northwestern last fall goes to Highland Park, Ill., High School as assistant to Dave Floyd and head baseball

coach . . . Notice the number of assistant coaches who are moving up into head spots this fall? To mention a few, Red Dawson from Michigan State to Pittsburgh; Steve Hokuf from Pittsburgh to Lafayette; Carl Wise from assistant at Washington and Lee to head coach; Charley O'Rourke from Holy Cross to the University of Massachusetts; John Yovicsin from assistant to head coach at Gettysburg; Bernie Crimmins from Notre Dame to Indiana; Alton Kircher from assistant at Washington State to head coach; and Bear Wolf steps up to the head spot at Tulane . . . Can any track coach top the marks hung up by Jack Weiershauser, Stanford track coach, while an undergraduate? Here they are: 100 yard dash, 9.8; 220 yard dash, 20.7; quarter, 47.5; 220 lows, 23.2; and 200 meters, 20.9 . . . Speaking of Stanford, Ev Dean who stepped down last year as basketball coach, can point with pride to the fact that in addition to 13 of his boys who are college basketball coaches another 40 are coaching the sport in high schools.

• • •

A year ago was anniversary year for baseball and this year finds crew racing holding the anniversary spotlight with both the Harvard-Yale Regatta and the Poughkeepsie Regatta celebrating notable dates . . . Only one of the track records in the California stadium is held by a Californian, that being Bob Kiesel's 9.5 100 in 1932. Adding insult to injury, two of the records are held by Stanford men . . . Here are a few more "old timers" who are retiring this year: Ray Nash for 34 years baseball coach at Milton Academy in Massachusetts leaves behind an impressive record of 261 games won against only 128 lost. Frank Burke of Stoughton, Mass., High School retires after 24 years coaching baseball and 18 years coaching football . . . For coaching records, how's this one? Tom Booras, swimming coach at St. Francis Prep. in New York City, has won 227 dual meets including a string of 42 straight; 6 national Catholic School titles; and 11 New York State Catholic School titles over a period of 20 years.

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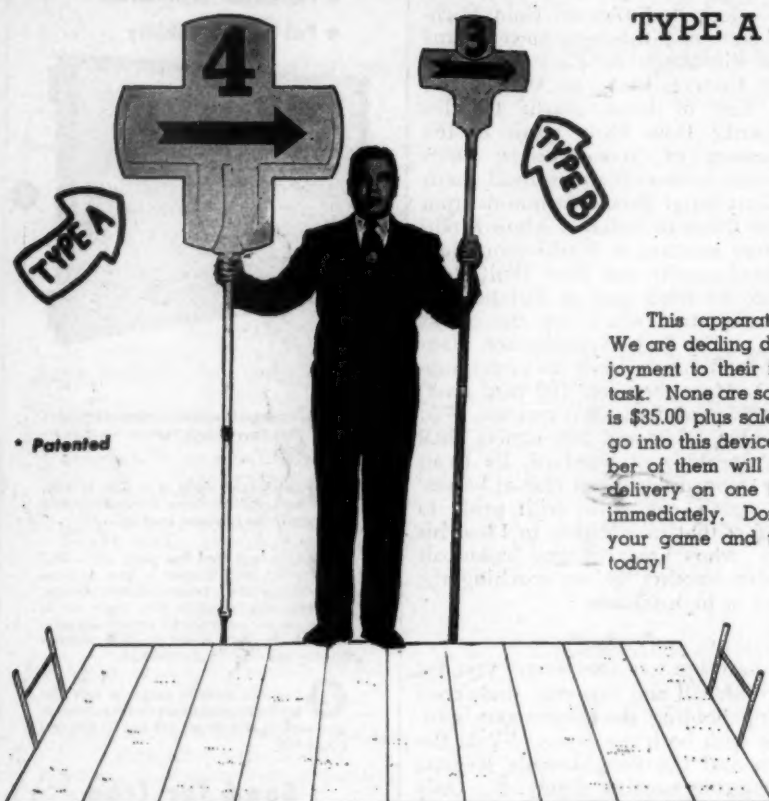
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Wisconsin's T Formation

By IVAN B. WILLIAMSON
Head Football Coach

AT Wisconsin we major in the straight T formation and the T formation with a set flanker. Our offense is primarily our own version, using the so-called original Chicago Bears' T as the basis from which to start. We do not use the Missouri T (sometimes referred to as the split or sliding T).

Our straight T formation is the conventional one. When we operate from this there is no man-in-motion or movement in the backfield until the snap of the ball. This is used about 30 per cent of the time; however, we are not too concerned about the relative number of plays run from

in a balanced line. The ends vary anywhere from six inches to about 12 yards from the tackles. Therefore, in the flanker attack the back may be inside or outside of the end, depending on the end's split.

Some use of the halfbacks in motion, either from the straight T or the flanker T is made. At the present time we lean toward the flanker rather than motion, in order to have the defense positioned, where there is less difficulty with blocking assignments.

We have also added an unbalanced line to our attack. This is set up by moving one of the ends over to the other side.

back has thrown 95 per cent of the passes.

We have two basic series of plays around which our running attack is built. Number one is the halfback hand-off series, and number two is the fullback hand-off series. Diagram 1 shows the backfield operation in the hand-off to the halfback.

Faking the hand-off to the right halfback and giving to the left half-off-tackle are shown in Diagram 2.

Diagram 3 shows faking the hand-off to the right halfback and pitching out to the left halfback on an end run.

In Diagram 4 the quarterback hands off to the fullback. The line blocking is the same as in the hand-off to the halfback.

Faking the fullback hand-off and pitching out to the left halfback is shown in Diagram 5. Again the line blocking is the same as it is in the end run with a fake to the halfback.

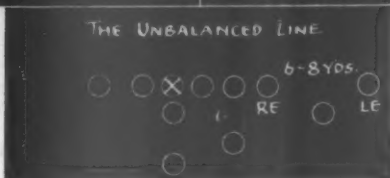
Diagram 6 shows a trap play on the defensive guard or tackle, depending on the defense, after faking the hand-off to the fullback.



either this or from our flanker attack.

Normally, our flanker attack involves the right halfback setting to his left or the left halfback setting to his right. This distance may vary anywhere from one yard outside of his end to 10 or 12 yards. Occasionally we set the left half to his left at varying distances, or the right half to his right.

In both the straight T and the flanker our guards are split about 18 inches from the center, and the tackles are the same distance from the guards

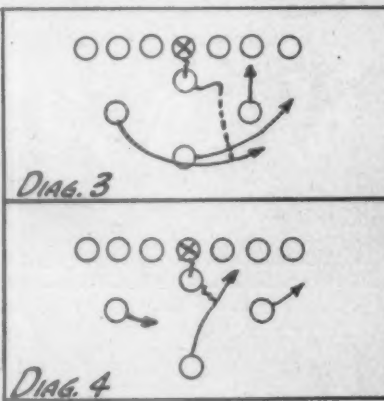
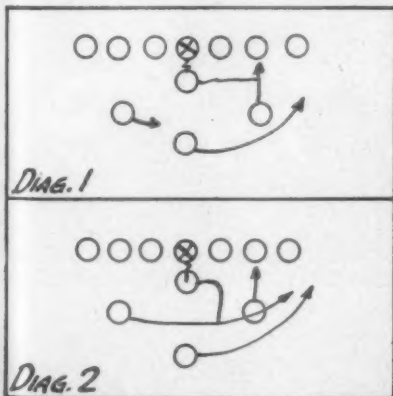


It is our feeling at Wisconsin that in building an offense the most difficult problem is the adjustment of line blocking assignments to varying defenses. These should be the same, or as nearly so as possible, from all formations. The offense should be kept as simple as possible and still present opportunities for the use of speed, power, and deception in the running attack, and a sound passing game.

In our T formation the key to the entire offense is the quarterback. The number one requirement is that he must be a passer. We feel that the ball-handling and faking may be learned by any boy who can really throw. It helps if he is a good runner, but passing ability is our primary consideration. We will throw running passes with the other backs if any of them have this ability, but it is not a requirement in our offense. In the past three years our quarter-

Diagram 7 shows a counter play that is very successful if the defense is moving fast toward the original movement of the backs.

Some of these plays may be used from the flanker as well as the straight T. It is necessary to have additional operations to the attack when one of the backs is set or motions. These operations should be kept to a bare minimum and the line blocking should be kept the same. For example, every man from end to end should have the same assignment



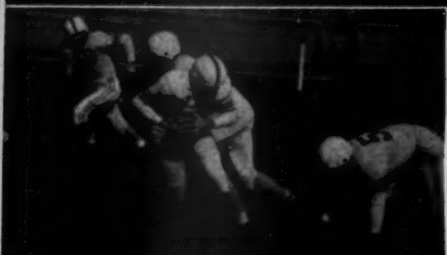
against a particular defense on an end run to the right from the straight T that he had when there was a flanker or motion. This should be true on the off-tackle play. By doing this, several plays may be added

which involve only the backfield maneuvers and no new learning is required of the men up-front.

A good offense should have four kinds of passes: (1) Those which develop out of running play operations.

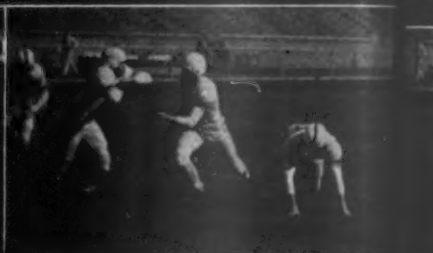
(2) Those that have the quarterback go straight back and are not particularly deceptive. (3) Running passes. (4) Screens.

Diagram 8 shows a pass which develops out of the fullback hand-off



(Series A) Backfield ↑
HAND-OFF TO RIGHT HALF

(Series B) Line →



(Series C) Backfield ↑
FAKE TO RIGHT HALF
GIVE TO LH OFF-TACKLE

(Series D) Line →



back
articu-
passes.
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series. In this type of pass we always send four receivers. The left half-back blocks the end of the line. The tackle takes the next man in from the end. Then the guard takes a man on him, or if there is no man

on him, he pulls for the end of the line. The center takes a man on him or blocks in his area. Then the left guard pulls and peels back, looking for a rusher from the short side. The left tackle fills the guard-pulling

hole, blocking the first man to come to him.

Diagram 9 shows a pass with the quarterback going straight back. When using this play we try to flood

(Continued on page 22)



Wisconsin's Backfield Play

By **ROBERT H. ODELL**
Backfield Coach

WHEN starting with new and inexperienced backs at Wisconsin, we spend as much time on fundamentals and details as is possible. We want our backs to develop good habits. Drills on stances, starts, footwork, ball exchanges, etc., are given daily until the backs are operating correctly without thinking. As they gain more experience, we spend less time on individual drills and work on play assignments and ball-handling with a full backfield. The varsity backs will handle the ball a minimum of 15 minutes a day, and very often we go for a half hour. Perfection and timing are emphasized. All of our plays are run through as fast as possible with two sets of backs and one quarterback. It is good conditioning, and after the backs have run one play several thousand times they make very few errors.

During the first hour of every practice session, when the offensive backs are ball-handling and passing, the defensive backs are on another field going through pass defense drills and working against our opponents' pass patterns. This hour of work with the pass defenders is as important as anything we do. It is easy to see that it takes an exceptional back to play on both the offense and defense. We try to specialize as much as possible, but are forced to split time with some of our better boys.

In evaluating the various abilities of the backfield candidates, the most emphasis is placed on speed. Each boy is timed for 40 yards once or twice a week during spring and early season practice. As a result, we get an accurate record of each player's speed. With very few exceptions, we know that if a boy cannot run the 40 in at least 5.0 or 5.1 seconds, he is not a good prospect. The boys are also timed for 10 yards to determine quickness. Naturally, a good back must have other abilities in addition to sheer speed. Desire, body control, split vision, good hands, and athletic sense are other qualities which are necessary.

The quarterback takes his position behind the center with his feet parallel. This stance is preferred because in our opinion it allows better

ROBERT Odell was an All-American at Pennsylvania, graduating in 1943. In his last season he received the Heisman award for "Football Player of the Year." After serving three years as communications officer in the navy he joined brother, Howie's, staff at Yale in 1946. During the 1948 season he was on the staff at Temple University, and in the spring of the following year joined forces with Ivy Williamson at Wisconsin.

movement in all directions. The ball is taken with the right hand up, angled slightly to the right, and we insist that the left or bottom hand be held firmly against the right. This pressure from below prevents the hands from becoming separated and eliminates a big cause of fumbling. The right arm should be almost straight, the body slightly forward, and the knees flexed. The quarterback should be relaxed and ready to move with smooth, quick actions. Quickness is very important and can be developed with practice. The responsibility for the ball exchange rests with the quarterback. He should not slam the ball, but should place it firmly into the runner's mid-section. We always insist that he aim for the far hip to insure a safe exchange. After giving the ball, the boys may do anything to help the play — fake a pass, a pitch-out, or a bootleg.

Our quarterbacks do most of the passing and must be able to throw short quick passes, back-up passes, and running passes. As much time as possible is spent throwing the ball, and our regular quarterback will pass at least one-half hour every day. We cannot make a passer, but feel that we can improve him.

The running backs take a three-point stance. This stance is used primarily to stop leaning and backfield in motion penalties. We want the backs to be in a position so they can move in all directions with equal ease. Their heads should be up, eyes straight ahead, and backs about parallel with the ground. The right hand is down and the right foot is back about 10 to 12 inches. There should be slight pressure on the hand. Left-handed players usually prefer to have the left hand down and the left foot back. We do not ask these players to change. Our right halfbacks are not required to put their left hands down.

When receiving the ball from the quarterback, the inside arm is lifted with the elbow high. The outside arm forms a pocket on the far hip with the elbow held close to the body. When taking the ball, a back should run high and present a large target for the quarterback. When faking for the ball, our backs should run low, form a pocket for the fake, and then fold their arms across their chests.

In our system the backs have many important blocking assignments. They protect the passer, cut off guards, take ends in or out, and block downfield. These different blocks require sound fundamentals, good judgment, and a desire to do a job. We teach the same basic fundamentals as are taught to the line and ends, but spend most of our time on the open-field type of block. Blocking aprons and dummies are used for most of our practice work to reduce the chance of injuries.

(Continued on page 20)



(Series G) HAND-OFF TO FULLBACK



Wisconsin's

Line Play

By MILTON BRUHN
Line Coach

At the University of Wisconsin, we want to have our offensive linemen possess size and speed, and we want them to develop an explosive charge.

A constant record of a player's time in a 40 yard dash and in a 10 yard distance is kept to develop speed. Individuals try to better their own time day after day. By keeping the players conscious of their records in these distances, we have been able to better our team speed.

When the linemen take their positions on the line of scrimmage, they line up in a primary formation. The center gets over the ball, ready to pass it to the quarterback. Tackles and guards are in an up position with their hands held lightly on their knees. Their feet are in a heel-toe alignment with the right foot back, but if a player finds more comfort with his left foot back, he is permitted to place it that way. The head should be erect and looking straight down the field. We run plays from this primary formation. The feet of the players are from 18 to 24 inches apart.

From this primary formation we set into a three-point stance on the quarterback's command. The feet do not move from one formation into the other. The knuckles and thumb of the right hand are placed on the ground if the right foot is back. The other arm is placed with the elbow held near the point of the knee of the left leg and the entire arm is relaxed. The hips are held so the back is in a position parallel to the ground. The weight on the hand is distributed so the lineman can go

MILTON Bruhn graduated from Minnesota after playing on the national championship teams of 1934 and 1935. Following graduation, he joined the staff at Amherst, and remained there for seven years. In 1943 he returned to Minnesota, then coached at Colgate in 1944 and '45, and at Franklin and Marshall in 1946. The following year he joined forces with Ivy Williamson when Ivy was made head coach at Lafayette, and moved to Madison with Ivy in 1949.

forward or pull out with equal agility. The head should be forced back and the neck held in a rigid state.

We line up in a fairly parallel stance because we feel such position will aid us in our style of line charging. Our charge is taught in three phases — lunge, position step, and follow-through. The lunge is developed by charging at a stand back dummy, off both feet, extending the body and leaving the feet in the original position.

The second phase is developed on a Crowther machine. A player or a coach stands on the machine so it will remain stationary. Then the lineman takes his position in front of one of the pads of the machine. He lunges into the pad and catches the action of the spring by bringing both feet up wide simultaneously.

The third phase — follow-through — can be practiced on a stand back dummy, Crowther machine, or against

men. The lineman should use short, powerful, choppy steps in the follow-through of a block.

Too much dummy and machine work can be detrimental to sound line blocking. We spend from 15 minutes to a half hour per session on machines and dummies. However, it was found that live bait blocking was necessary to create an effective offensive line. Men are lined up on either side of a line of scrimmage, a pair about a yard apart from the next pair. One side of the line of scrimmage assumes an offensive position and the other a defensive position. At the coach's command, and using one pair at a time, the offensive man blocks the defensive man full speed, using all three phases of our line charge. The defensive man works passively and aids the offensive man into a good blocking position. Usually we have each man take three blocks with his right shoulder and three blocks with his left shoulder. A head-on man is always blocked as described above. If we have position on a man and block him in with a shoulder block, we take a short lead step with the inside foot.

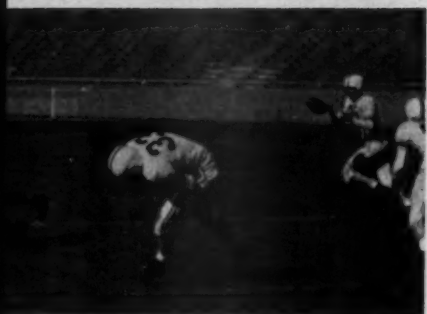
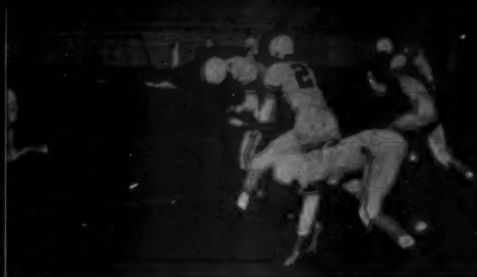
When we double team we have a post blocker and a lead blocker. The head-on man or post blocker tries to raise the defensive man and keep the defender from penetrating. The drive blocker takes a lead step with the nearest foot and drives the defensive man at a 45 degree angle. After the initial charge, the post blocker becomes a passive blocker, always keeping a position parallel with the line of scrimmage.

When we check block we use either a shoulder block and then slide into a side body, or go directly into a side body.

Much time is spent on play drills. For example, on a given day we might break down our hand-off play, use only one side of the line, and block against a defensive set-up. The center, right guard, right tackle, and right end will work on the right hand-off, and a center and the left side of the line will work on a left hand-off. During another session we might do the same with the off-tackle play or a sweep.

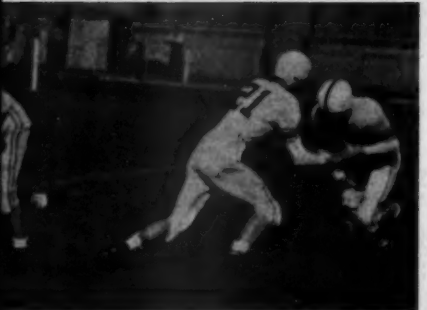
Since it is felt that we can get our maximum charge out of a parallel stance, we have only one alternative on a pull-out step. The boys are instructed to take a lead step and not a cross-over step. When pulling to the right, the force is created by driving off the ball of the left foot. The right foot is placed to the right so there is a slight gain on the first





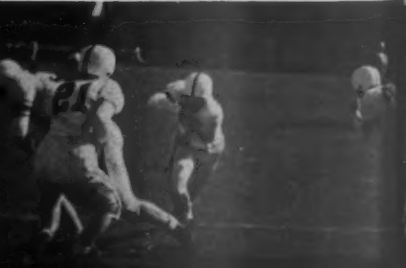
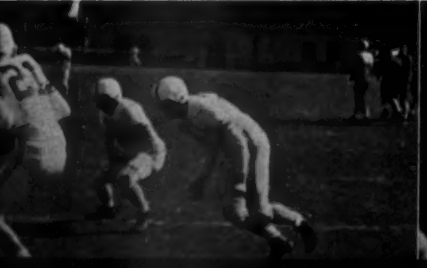
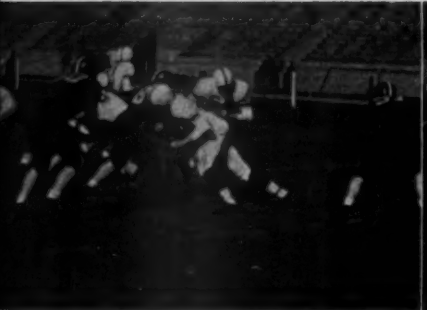
(Series H) Backfield ↑
FAKE TO FB-PITCH-OUT
TO LH AROUND END

(Series I) Line →



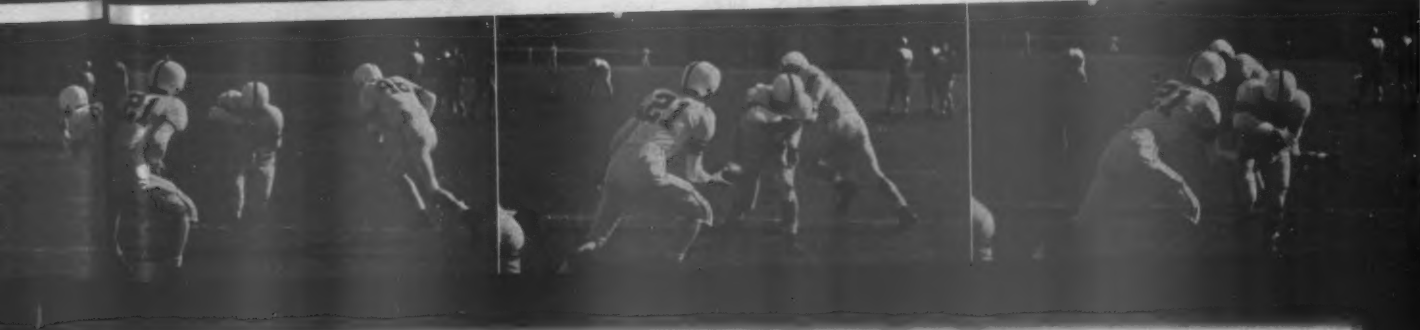
(Series J) Backfield ↑
FAKE TO FULLBACK
GIVE TO LH ON TRAP

(Series K) Line →





(Series M) Line →
FAKE TO FB-GIVE TO RH
ON COUNTER OFF-TACKLE
(Series L) Backfield ↓



← (Series N)

PASS PORTECTION AGAINST THE SIX

step. The right arm leads to the right and the body is kept low behind the line of scrimmage and in the hole as the puller turns up. The lead foot should be pointed into the direction the puller intends to go. On a shallow pull the foot will not come around as far as on a medium pull. The foot will point deeper on a deep reverse than it will on an off-tackle play.

Our downfield blocking on back-ers-up varies from a shoulder block and a side body block to a reverse block. The position and angle of the defensive man will change the block thrown by the offensive downfield blocker. We advocate a roll block on the deep secondary men. The roll block is aimed at the defensive man's hips, and after the block is thrown the blocker continues to roll through the defensive man. The arm and leg are extended so the entire length of the blocker's body is thrust at the defender.

A great deal of downfield blocking practice is carried on against stand back dummies. Our favorite downfield blocking drill is one used with an offensive team against a defensive team. All unit blocking is passive. All downfield blocking is full scale. The ball-carrier is allowed to get through the unit blocking area; the defensive men the downfield blockers are after are also playing full scale. We usually employ this drill when we feel our downfield blocking needs brushing up.

After every game our offense is charted. One of the reasons this is done is to learn what percentage of our game consists of passing. If passes make up one-third of the total offense, we will work on pass protection one-third of our preliminary practice. Our basic pass protection is one that teaches a lineman to re-

(Continued on page 20)

(Series O) →

PASS PROTECTION AGAINST A FIVE



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Wisconsin's

End Play

By PAUL R. SHAW
End Coach

THIS article pertains to the type of end play we have endeavored to teach at Wisconsin over the past three years. Due to limited space we will cover only the major phases of our type of offensive play.

Offensive End Play

The perfect end is, as we all know, a boy with good height, weight, speed, change-of-pace, a quick starter, a good blocker, and possessing a great desire to throw his body in front of defensive halfbacks. In addition to these qualifications, the number of passes being thrown in present-day football require that an end have a better than average pair of hands. However, it has been our experience that a good, big, solid blocker does not possess the qualifications of a pass-receiving end. Neither does a fast, shifty, pass-receiving end have the necessary qualifications of a good, hard, rugged blocker. With these basic thoughts in mind, our entire offensive attack, where end play is concerned, has been set up to utilize the potentialities of the boys who hold down this position the best, and

PAUL Shaw played end at Pittsburgh, graduating in 1938. Following graduation he assisted at Hazelton, Pennsylvania, High School, through the 1941 season. Paul was then with the Army Air Corps as an officer until his discharge in 1946. In September 1946 he was appointed end coach at Lafayette and remained in that capacity the next year when Ivy was appointed head coach. Shaw moved with Ivy to Wisconsin.

at the same time balance our attack so we are able to pass or run the ball when the occasion presents itself. We sincerely believe that over the past three seasons our offensive ends have done an adequate job, both as pass receivers and blockers. This has helped us tremendously in being a threat from any position on the field, either on the ground or through the air.

Stance. We have changed the position of the ends in order that we may cope with the type of defense encountered most often. With the

tackles playing our ends in a regular six-man line, or a six overshifted, we find the ends have difficulty getting inside these men to carry out downfield blocking assignments. This also holds true in regard to their being potential pass receivers. When we encounter a five-man line, our ends are constantly harassed by either, one, two, or sometimes three defensive men. With this in mind, we plan to give our ends the option of releasing either inside or outside the defensive tackle in a six, or the end of the line in a five-man line. This year our ends will line up with their outside foot back and their outside hand down. In releasing outside tackles, they will take a short lead step with the back foot, shove off with the outside hand, and at the same time use a head fake inside. Because a quick start is essential to an end, we insist that the toe of his back foot be behind the heel of his front foot, and in some cases this position is exaggerated. Of course, this position depends on the physical make-up of the boy concerned; however, we do insist that one foot be deeper than the other.

Considerable time is spent on the use of head and body fakes, both on the line of scrimmage and in eluding defensive backs. Simple head fakes are employed mostly on the line of scrimmage; however, downfield we work on pivoting, change-of-pace, and driving off the inside foot to go for outside passes, and off the outside foot to go inside for passes.

From 30 to 45 minutes are spent each day in receiving passes and running pass patterns. Our ends are taught to have their thumbs together on only one pass. This is the quick pass thrown over the defensive line. The pass should be thrown high, and we feel our ends get greater height when their thumbs are together. At the same time, we ask them to catch

**(Series P) RE TAKING
DEFENSIVE TACKLE OUT,
REVERSE BODY BLOCK**



the ball at full arm's length out in front. This enables the ends to shut out the defensive halfback. All other passes are caught with the thumbs to the outside. Our post passes, caught at a distance of nine yards, are trapped. In this way we try to emphasize the fact that we are only interested in making the nine yards; therefore, the boys are instructed to catch the ball in the pit of their stomachs and to make sure they have control of it before pivoting to the outside and continuing downfield.

Probably the most important point where pass receiving is concerned, has been saved until last. From the first day of practice until the day of our final game, we drill into the minds of our pass receivers that no matter how inaccurately a ball is thrown, the receiver should never take his eyes off the ball. This holds true on long, short, jump, or post passes. We also emphasize the fact that the body, legs, arms, and hands in particular, must be relaxed if the receiver is going to be better than average. We try to train our receivers to "look" the ball into their hands.

A Description of the End's Block in the Illustrated Series

Series B—Right end blocking the backer-up out against a tight six-man line (pages 6 and 7). Our end is taught to narrow down his stance on this play. First, he takes a short step forward and to the inside with his inside or front foot. This gives him an inside out position on the backer-up. His next movement is directly forward, shooting his body across that of the backer-up with his head downfield. He lands on all fours, making sure he does not shoot beyond the defensive man. Staying high enough to keep the backer-up from reaching over, the end then eases him to the outside, with all of the drive coming from his inside leg. We find the two hardest phases of this block to master are: 1. The offensive end has a tendency to shoot by the backer-up. 2. The end has trouble staying on all fours, and has a tendency to go to the ground.

Series D—The right end takes the tackle in on an off-tackle play with a straight shoulder block (pages 6 and

7). In this series the end's first step is with his front or inside foot. He steps almost parallel to the line for position on a hard-charging tackle. As he makes contact with his left shoulder, his elbow is held high and his outside leg is brought up into driving position. With his eyes focused on the tackle's mid-section, he drives his outside foot into the ground and forces the tackle down the line of scrimmage. We use this term because we do not want the tackle to penetrate across the line of scrimmage and interfere with pulling linemen.

Series F—The right end blocking the backer-up in against a tight six-man line (pages 6 and 7). Again the end narrows down his stance. His first movement is a step forward and to the outside with his back or outside foot. This gives him outside position on the backer-up as he drives forward and throws his body across the defensive man, head downfield. Once he makes contact, he stays on all fours, fights in close to the body, remains in a position high enough to keep the defensive man from reach-

(Continued on page 22)



(Series Q) RE TAKING DEFENSIVE TACKLE IN WITH REVERSE BODY BLOCK



A Functional Building for Physical Education, Recreation, and Athletics

By LYLE BENNETT

Track Coach, Central Michigan College, Mt. Pleasant, Mich.

Portable Bleachers and Folding Partitions—Horn Bros. Co.

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DURING the 1949-50 session the Michigan legislature appropriated \$1,200,000 to build a physical education building for Central Michigan College of Education located in Mount Pleasant.

This new structure, which replaces a gymnasium that was built in 1906 to accommodate 350 students, will serve a student body of approximately 3500. Construction was started in the spring of 1950, and the building was completed last summer.

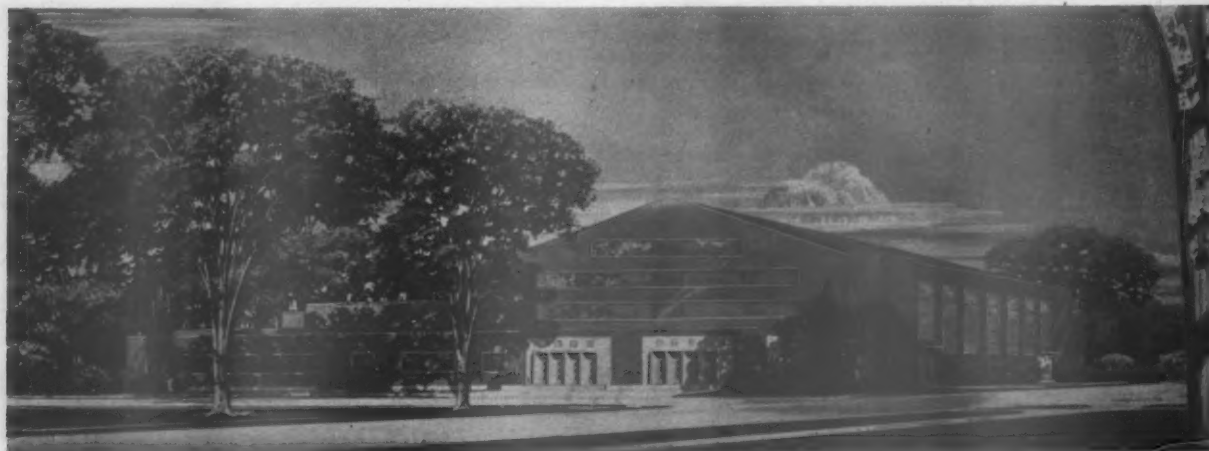
The new building is of fireproof construction with a steel skeleton and lightweight aggregate block and brick curtain walls. Walls in the gymnasiums and field house are painted block; corridor, pool, and dressing

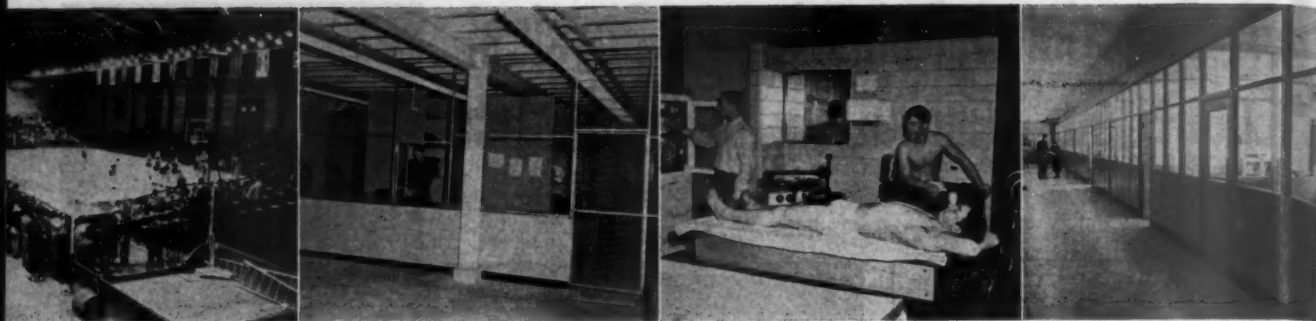
room walls are ceramic tile; office and classroom walls are painted plaster. Corridor and dressing room floors are terrazzo; all other floors, except in the field house and gymnasiums, are asphalt tile. The building is heated by steam from a central heating plant. Radiators of the convector type were used throughout. The roof is gypsum concrete poured over forms of cellular glass.

For three years prior to the appropriation, the physical education staff worked with the architect, Roger Allen and Associates of Grand Rapids, Michigan, to design a functional building to meet the increased needs of the college. In planning the building it was necessary to provide facilities

for the following purposes: (1) recreation, health and physical education classes for 3500 men and women students; (2) program in health education and physical education for major students; and (3) a varsity and freshman athletic program and intramurals.

Many regular staff meetings were held during the years 1947-1950 for the purpose of: (1) planning the building and its equipment; (2) developing a well co-ordinated, functional program of activities with the use of modern equipment in a new plant. The daily program begins with 8 o'clock classes and ends with evening intramurals, athletic contests, and student or faculty activities all





well-planned and supervised. A staff of five full-time custodians and 25 students working part-time maintain the entire building.

This new health and physical education plant may well be called a combination building, housing the activities of health education, physical education, recreation, intramurals, athletics, and minor sports. Adjacent to it is a large parking area and several tennis courts. The building is a monument to the continuous efforts of an energetic president, Dr. Charles Anspach, that his college should have adequate facilities for the education of future Central graduates, and that health and physical education should play a vital role in modern American college life. At Central the various functions mentioned are all under the supervision of a director of the Department of Physical Education, Health Education, and Recreation.

Facilities of a Combination Building

One of the most welcome features of the building is its spaciousness. Another concerns the large number of activities that may be carried on at any given hour, as the following facilities

Illustrations from left to right show:

A field house scene on the south side with the pole vaulting pit, arrangement of the H type portable bleachers, and a chute in the far corner which allows for a 65-yard straightaway.

The main athletic equipment room which services basketball, track, and baseball. It is also used for the storage of some intramural and physical education equipment.

The training room with the diathermy and whirlpool machines is shown. Additional cupboards, lamps, footbaths, and taping tables which are not shown comprise the rest of the unit.

The eight offices shown here are convenient to all parts of the building and to each other.

ities show: two classrooms, special dance room, two regulation gymnasium floors, two handball courts, one swimming pool, a field house basket-

The illustrations below from left to right show:

A portion of each of two 60 foot by 90 foot gymnasiums with folding doors partly open. Notice that each gymnasium has folding bleachers.

The post office type locker room which is used for general physical education. These lockers are used in conjunction with full clothes lockers in an adjoining room.

One of the typical storage rooms. Overhead doors in these rooms allow for large equipment to be moved in and out freely.

ball court, practice space for indoor football drill, complete track and field event practice facilities, ample storage space, and abundant locker and shower room equipment. This is truly a combination building that is conveniently arranged into a one-floor plan; one that is a pleasure to work in and direct activities primarily dedicated to develop future teachers and athletic coaches in specific fields, in addition to playing a vital role in health and recreation. Further, the presence of this modern building on the campus has developed a new awareness, understanding, and appreciation of the function of physical education in its complete setting. At the present time the staff is studying the problem of offering a wider selection of sports in which skills will be taught so that each student will better enjoy his or her participation later in intramurals.

With a challenge for all, the physical education teacher and the general student, the new facilities allow for extended development of personalities, and of many useful skills. The members of the staff feel that their new home makes it possible to an-

(Continued on page 26)



flexible

Central Michigan College, like hundreds of schools and universities, from coast to coast, specified Horn folding partitions and Horn folding gymseats.

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Visual Aids in Physical Education

By THEODORE P. BANK
President, The Athletic Institute

TODAY'S physical educator has many fine opportunities to strengthen the effectiveness of his teaching program by utilizing the modern tools of audio-visual education.

Audio-visual education was employed extensively by our armed forces during World War II to achieve the miracle of teaching complicated skills and techniques to millions of men in a few short months — using movies, slidefilms, illustrated manuals, charts, etc.

Upon testing the value of this method of education, the armed forces found that students learned up to 35 per cent more, and remembered what they learned 55 per cent longer, than they did when taught in the more traditional fashion.

Audio-visual aids may be extremely valuable in the physical education field. The coach of today is called upon to teach large groups in a relatively short time, obviating individual instruction and attention. He must often teach several different activities — some of which he may not be too experienced in himself. And, teaching athletic skills is never an easy task, since the student must use and co-ordinate both physical and mental skills.

Consequently, any aid which the sports instructor can use is most certainly valuable and desirable. It should be stressed here that audio-visual aids are aids only—they cannot do the instructor's job for him. For example, a blackboard cannot teach mathematics, but the mathematics teacher would have a hard time if he did not have one to help get his subject matter across.

There are many types of audio-visual aids which the instructor may readily incorporate into his teaching program. These include: 1. Motion pictures and film loops. 2. Slidefilms and slides. 3. Still pictures, charts, graphs, etc. 4. Opaque projectors.

The use of such aids may accomplish many objectives. They may: 1. Greatly assist the instructor in teaching rules, games procedures, and playing techniques. 2. Promote keener interest and appreciation for a sport, instilling in the students a greater desire to learn. 3. Provide excellent tools for reviewing or testing when desired, or when inclement weather

or other conditions curtail the scheduled activity. 4. Direct favorable attention and publicity to the physical education program.

Two factors frequently discourage the physical educator from using audio-visual aids. One is not knowing how to co-ordinate them into his teaching program, and the other is not knowing what materials are needed and how to obtain them or how to use them from a mechanical standpoint.

The first factor is not serious. In order to co-ordinate audio-visual aids into a program, a coach has only to

THE ever-growing use of visual aids in coaching and physical education prompted us to schedule an article on their use. We turned to Colonel Ted Bank for such an article. Ted began his coaching in Louisiana High Schools and then served under Bernie Bierman at Tulane until 1935 when he became football coach and athletic director at Idaho. Prior to Pearl Harbor he was recalled by the army to head up the athletic, physical education, and recreation program. Following the war he was offered the presidency of the Athletic Institute, a position he accepted because he saw in the work of this non-profit organization an opportunity to remedy many of the shortcomings in the health and physical training of the youth of the country which were so apparent in the draft statistics. One of the means the Athletic Institute uses in its worthwhile work is visual aids.

realize exactly what he wishes to accomplish, and then find the proper material to assist him. For example, does he want his students to get a thorough introduction into the activity with a minimum expenditure of time and effort? If so, he should get one or two good motion pictures showing how the game is played, what its rules are, what equipment and terminology are used, etc. A good introduction via a motion picture will provide a firm base on which he may build the remainder of his teaching program. Further interest and a greater grasp of the subject can also be

engendered by posting on the bulletin board charts or pictures showing the history of the activity, its rules, playing skills, equipment, etc.

Suppose he wishes help in teaching the activity! Then he should use motion pictures, particularly those which employ slow motion or stop action to emphasize techniques. He should use slidefilms and slides to allow careful examination of playing skills, live demonstrations with skilled players, and bulletin board pictures or drawings to highlight certain actions.

Does he wish to test his students? If so, he should use slidefilms, slides or still pictures—ask the students to name a piece of equipment being shown, or to decide whether an action or position pictured is right or wrong, or whether a player is violating a certain rule or not.

Obviously, these are only a few of the ways in which audio-visual materials can be employed to assist coaches. The important thing to remember is that there is an audio-visual aid for every purpose—with thought and investigation coaches will have no trouble finding it, and fitting it in to their programs.

What about the second difficulty—getting audio-visual materials and equipment, and putting them to proper mechanical use. Let us look at each type separately.

Motion Pictures. Motion pictures on practically all sports activities can be purchased, rented, or obtained on free loan from many commercial organizations. The Athletic Institute has a film guide describing all films (plus slidefilms) currently available. Announcements of new athletic films are constantly appearing in professional magazines, such as the Athletic Journal.

The fee on a rented film runs from \$1 to \$3. A request for such a film should be sent in well in advance to insure getting a booking. The best thing to do is to set up an annual schedule showing the type of films which will be needed, and co-ordinate the schedule with the instruction program.

Most schools have motion picture projectors, so that should be no problem. If a school does not have a projector, one may be borrowed locally.

Darkening a gymnasium for proper

(Continued on page 36)



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Line Play

(Continued from page 12)

treat about a half yard, then pick up his assigned man head on, and the lineman tries to stay in front of the assigned man unless he is driven back. Then he drops and blocks the rusher low. If a defensive man takes an outside course, we reverse block the rusher and keep him from the middle.

Our running pass protection resembles a run as much as possible, and the blocks are those which are used on a conventional sweep.

To teach a pass protector proper balance, we use the following drill every day. A defensive man lines up across the scrimmage line from an offensive lineman. The defensive man is asked to rush into the offensive area at about three-quarters speed and change his course about three times on the rush. The offensive man hops back one-half yard and then stays in front of the defensive man as he changes his course. We observe and guard against crossing of the feet, height of the block, and illegal use of the hands. After the defensive man has varied his course three times he will charge hard and straight. Then the offensive man will reverse block the rusher or he will block low — get into the defender's legs.

We try to keep the types of blocks we use limited in number and believe in repetition. The same type of block is done over and over until it is letter perfect.

During our practice sessions we switch quite rapidly from one type of activity to another. This breaks the monotony and keeps the interest at a higher level. We want the players to have fun on the practice field.

Series B—Halfback hand-off (page 6). The right tackle takes a lead step with his left foot and shoulder blocks the left defensive guard in. Then the right guard pulls, and taking a very shallow step, shoulder blocks the tackle out with his head on the downfield side. After passing the ball, the center goes through, blocking anyone approaching the ball-carrier from the left. If no one is in the area, he continues downfield.

Series D—Fake hand-off, left half off-tackle (page 6). In this series the right tackle takes a lead step with his left foot and shoulder blocks the left defensive guard in. He receives help from the right halfback. The right

guard pulls, and taking a medium step continues along the scrimmage line, and blocks the defensive left end. If the end penetrates across the scrimmage line, the guard takes a concave course and might reverse block the end out. After passing the ball, the center goes through, blocking anyone approaching the ball-carrier from the left. If no one is in the area, he continues downfield.

Series F—Fake hand-off, pitch-out to the left half around end (page 6). The right tackle throws a side body block on the left defensive tackle. He may throw a direct side body block or he may drive his shoulder on the outside of the defensive tackle and then slide into the side body block. The right guard makes a similar pull as he does on the off-tackle play. Just before he arrives near the left defensive end he ducks inside, goes flat, and roll blocks the left defensive back out if the back comes up fast to the outside. If the back remains deep and does not come up fast, the guard will get to the outside in the flat and block the halfback in. Then the center will throw a side body block along the line of scrimmage so the defensive left guard cannot penetrate. The right half will help the center with an outside block.

Fullback hand-off. The unit blocking for the fullback hand-off is the same as for the halfback hand-off.

Series I—Fake fullback hand-off, pitch-out to the left half around end (page 10). In this series the right tackle pulls around the defensive left tackle and blocks the left backer-up in. The fake of the ball-handling and the fake of the right end will hold the backer-up in position for the tackle's block. A side body block is preferred. The right guard check blocks the left defensive guard so a deliberate fake can be made by the backs. Then he releases, peels back, and blocks anyone coming across from the left. The center goes through and blocks anyone coming across from the left.

Series K—Fake to the fullback, give to the left half on a trap (page 10). The right tackle leads with his left foot, takes a very shallow course beyond the line of scrimmage, and blocks the defensive right backer-up. A reverse block is preferred. Then the right guard pulls, and taking a very shallow step, shoulder blocks the tackle out with his head on the downfield side. The block of the tackle and guard should resemble the hand-off block (Series B) as much as possible. The center leads with his left foot and shoulder blocks the

right defensive guard out. Then the left guard steps the same as the right guard and blocks the left defensive guard out with his head on the downfield side.

Series M—Fake hand-off to the fullback, give to the right halfback, counter off-tackle (page 10). In this series the left tackle takes a lead step with his right foot and shoulder blocks the right defensive guard in. Then the left guard pulls, and taking a medium step, continues along the line of scrimmage, and blocks the defensive right end out. The center lead steps with his right foot and blocks the defensive left guard out. Then the right guard pulls to the left, and taking a medium depth step, pulls through the off-tackle hole, and shoulder blocks the defensive right tackle either in or out.

Series N—Pass protection against a six-man line (page 12). The right tackle recedes slightly to make the defensive left tackle show his intention. He will stop his charge with a high shoulder block, invite him outside and reverse body block, keeping the defensive man away from the middle. Then the right guard pulls, and taking a deep step, blocks the first man coming in outside of the right tackle's block. He will also shock the defender with his shoulders and keep him from getting into the middle of the pocket we try to form. If the center expects help on his right side by a back, he will hop back and block the left defensive guard with his right shoulder. If he is driven back he will drop and get into the defender's legs.

Series O—Pass protection against a five-man line (page 12). In this series the assignments are the same as they are for six-man line blocking. This series shows the center being driven back and the use of a low block into the defender's legs.

Backfield Play

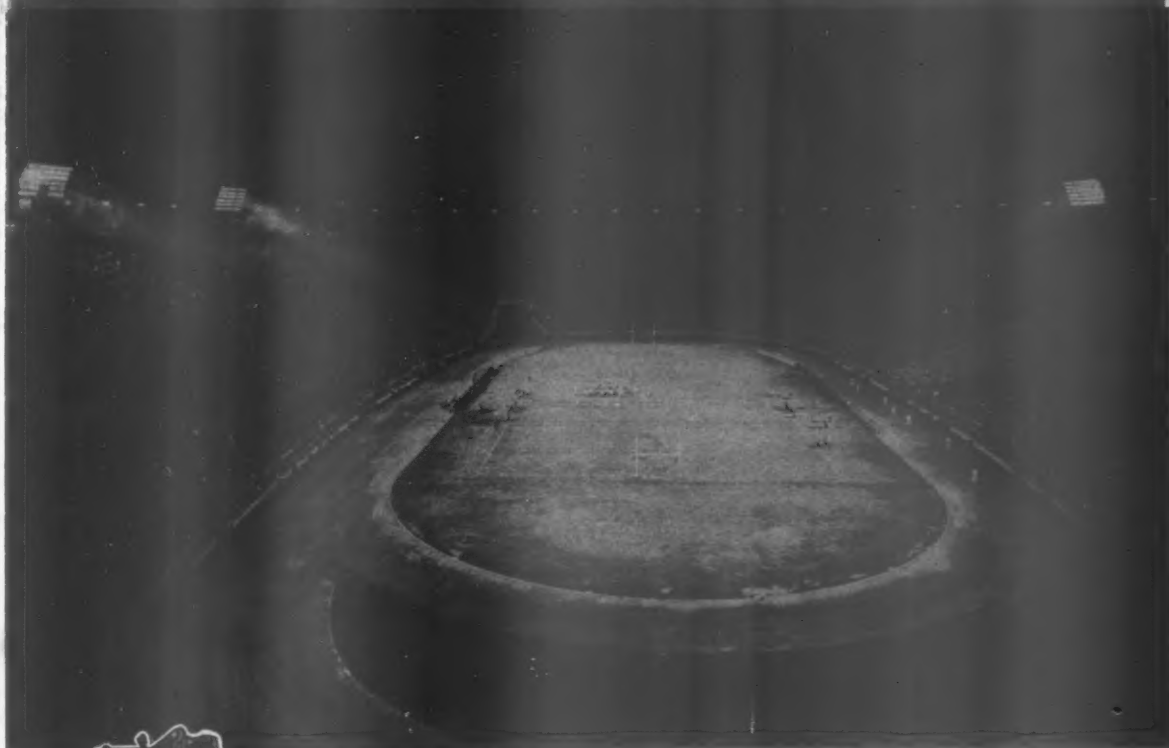
(Continued from page 8)

The only block the backs use which is different is the running shoulder block on drifting ends. We expect the ball-carrier to cut behind this block and want the blocker to stay on his feet, maintain good balance, and run through the defender. His big job is to keep a position between the end and the ball-carrier.

The picture sequences labeled Series A, C, and E (pages 6 and 7) show a set of three basic straight T plays.

(Continued on page 43)

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the huge Los Angeles Coliseum . . .



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The Los Angeles Coliseum is one of the world's largest football stadiums with a capacity of 105,000 people. The proper lighting of this huge amphitheater called for skilled planning and the best of floodlighting equipment. Crouse-Hinds experienced illumination engineers designed the installation and Crouse-Hinds long-range heavy-duty Type LCE-1120 Cast Aluminum Floodlight was selected for the job because it is ideal for use where the light must be projected a great distance.

Crouse-Hinds Illumination Department has also planned the lighting of hundreds of small and medium size fields, and the know-how that they have accumulated through long years of experience is at your service. Crouse-Hinds Type FLA Floodlight has the characteristics that make it ideal for the efficient lighting of small fields or the average size stadium. It's economical too!

Night games draw BIG crowds. When the above photograph was taken there were 90,910 people in the Coliseum. It's the same story in small towns, many more people turn out for night games. Get your share of the extra revenue that night games bring in. Start planning NOW for floodlighting your field for next season's games. Send drawings and details, and Crouse-Hinds illumination engineers will gladly recommend the proper selection and arrangement of floodlights for any application.



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FLOODLIGHTS · AIRPORT LIGHTING · TRAFFIC SIGNALS · CONDULETS

Wisconsin's T Formation

(Continued from page 7)

a zone because it shows as a pass to the defense almost immediately. The left end may either be a blocker or a receiver, depending on the defense and the number of rushers. If he blocks, the guard on his side stays in the line. In protecting we try to form a cup, forcing the rushers outside and enabling the quarterback to throw from the pocket. The guards pull on the first rushers outside of

IVAN Williamson played end on the three Michigan teams which won the Western Conference championships in 1930, '31, and '32, captaining the team his senior year. During the 1933 season he coached at Roseville, Michigan, High School. For the next six years he served under "Ducky" Pond and "Spike" Nelson at Yale. After three years in the navy he returned to Yale to assist "Howie" Odell. In 1947 he became head coach at Lafayette, and after two highly successful seasons was appointed head coach at Wisconsin.

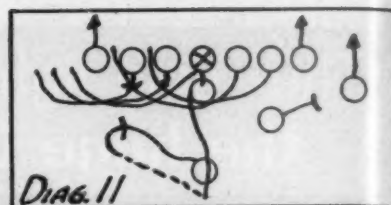
the tackles' blocks. The center hops back and protects in his area. If both guards pull, the fullback and one halfback block the defensive guards versus a six. Against a five both of the halfbacks are receivers and the fullback is a free blocker.

A running pass that has been very successful for us is shown in Diagram 10. This blocking is the same as that for the fullback hand-off pass. The idea is for the passer to get outside of the rush.

Diagram 11 shows a screen pass that, over a period of several years,

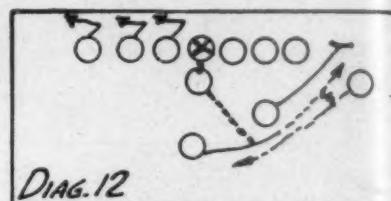
has produced some very valuable yardage for our offense. In the screen pass the blockers make passive contact for three counts and then pull in a wave in front of the receiver. The left tackle is responsible for the first defensive man in the area. The left guard is assigned to the halfback and the center to the backer-up on that side. The right guard and right tackle peel back for retreating defensive men. Then the fullback fakes a block on the defensive end of the line and turns to the outside for the ball. The right halfback blocks the first rusher outside of the man the right tackle blocks temporarily.

A few special plays are needed. Among these possibilities are: (1) A



circle the defensive left end.

We feel that a good attack must be balanced; with inside and outside running strength; with short and long passing; with power, deception, and speed. Above all, our concern is to have the offense as simple as possible and still be able to accomplish our objectives against all of the modern varying defenses used today.



End Play

(Continued from page 14)

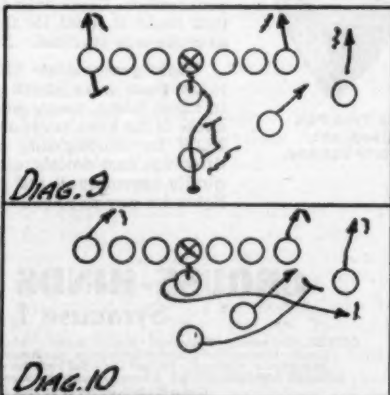
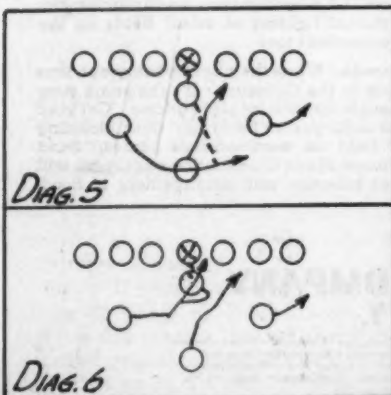
ing over, and eases the backer-up to the inside. All the pressure on this block comes from his outside leg.

Hand-off to the fullback. An end's block on a hand-off to the fullback is the same as it is on a hand-off to a halfback, shown in Series B.

Series 1—The right end blocking the halfback out on a tight six-man line (pages 10 and 11). In this series the strong-side end goes directly through and hits the backer-up head on. This serves a dual purpose, as the block sets the defensive man up for our tackle, who pulls to the outside of our end and finishes up on the backer-up. Secondly, this block by the end sets up the timing for his block on the halfback. As the play develops into an end run and the defensive halfback moves up to the line of scrimmage, our end, who is taught to go parallel to the line, very flat, drives the halfback to the sidelines and puts on a reverse roll block. This enables the halfback to cut back inside the end's block.

We find the most difficult phase of teaching this block is to keep our end along the line of scrimmage, and to have him throw his body and roll.

(Continued on page 31)



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For better service, for "on time" delivery, NOW is the time to place your order. MacGregor Goldsmith "Made-to-Measure" uniforms are built to the individual measurements of your team and in your individual colors

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COACHING SCHOOLS

ADELPHI COLLEGE C. S.

Garden City, L.I., New York Aug. 4-6

Courses—Basketball and public relations. Staff—Harry Combes, Royner Greene, "Dick" Crawley, and John F. Condon. Others to be announced.

Information—Tuition \$15.00 includes room, set of notes, and ticket to all-star basketball game. Directors—John E. Sipos, R. L. Simpson High School, Huntington, L.I., New York and George Faherty, Adelphi College, Garden City, L.I., New York.

See advertisement page 58 May issue

ALABAMA COACHING SCHOOL

University, Alabama Aug. 11-14

Courses—Football, basketball, and track. Staff—Ed Price, Pete Newell, and Herb Hodges.

Information—Tuition and room free. Director—H. D. Drew, University of Alabama, University, Alabama.

BELOIT COLLEGE

Beloit, Wisconsin June 12-14

Courses—Basketball. Staff—Dolph Stanley. Information—Tuition \$25.00 does not include room and board. Average cost of room \$1.50 per day. Director—Dolph Stanley, Beloit College, Beloit, Wisconsin.

CALIFORNIA WORKSHOP

San Luis Obispo, Calif. Aug. 10-22

Courses—Basketball, baseball, track and training. Staff—To be announced. Information—Tuition \$5.00 per unit. Room \$5.00 per week; board \$1.55 per day. Director—Robert A. Mott, Director of Physical Education, California State Polytechnic College, San Luis Obispo, California.

COLBY COLLEGE

Waterville, Maine June 19-21

Courses—Football and basketball. Staff—James Tatum and Edgar Hickey. Information—Tuition \$17.50 does not include room and board. Average cost of room \$2.50 per day; board \$3.00 per day. Director—Ellsworth W. Millett, Box 477, Colby College, Waterville, Maine.

See advertisement page 62 May issue

COLORADO H.S. COACHES ASSN.

Denver, Colorado Aug. 19-23

Courses—Football, basketball, baseball, track, and training. Staff—L. R. "Dutch" Meyer and Ben Carnivale. Others to be announced. Information—Tuition \$5.00 for Colorado coaches; \$10.00 for out-of-state coaches. Average cost of room \$5.00 and board \$3.00 to \$5.00 per day.

Directors—N. C. Morris, Ed Flint, and Don Des Combes, 1532 Madison Avenue, Denver, Colorado.

See advertisement page 56 May issue

COLORADO, UNIV. OF

Boulder, Colorado June 16-21

Courses—Football, basketball, baseball, track and training. Staff—Fritz Crisler, Dal Ward, Sparky Stalcup, Bebe Lee, Frank Prentup, Frank Potts, and Aubrey Allen. Information—Tuition \$10.00 does not include room and board. Average cost of room 75 cents per day; board \$1.75 per day. Director—Harry G. Carlson, University of Colorado, Boulder, Colorado.

IDAHO COACHES ASSN. C. S.

Boise, Idaho Aug. 11-16

Courses—Football, basketball, track, and training. Staff—Don Faurot, Babe Curfman, Eddie Cole, Babe Cassia, "Tippy" Dye, Stan Hiserman, and "Dubby" Holt. Information—Tuition \$10.00 for members; \$15.00 for non-members. Dormitory rooms available. Director—L. L. Patterson, South Junior High School, Boise, Idaho.

See advertisement page 59 April issue

ILL. NORMAL-WESTERN C.S.

Macomb, Illinois June 10-11

Courses—Football, basketball, wrestling, tennis, and officiating. Staff—Sid Gillman and Frank "Buckey" O'Connor. Information—Tuition free. Director—Ray Hanson, Western Illinois State College, Macomb, Illinois.

NORTHERN ILL. TCHRS. COLL.

DeKalb, Illinois June 17-18

Courses—Football and basketball. Staff—To be announced. Information—Tuition free. Average cost of room \$2.50 and board \$2.50 per day. Director—George G. Evans, Northern Illinois State Teachers College, DeKalb, Illinois.

INDIANA BASKETBALL SCHOOL

Kokomo, Indiana Aug. 14-16

Courses—Basketball. Staff—To be announced. Information—Tuition \$10.00. Average cost of room \$3.00 and board \$3.00 per day. Director—Cliff Wells, Box 83, Tulane University, New Orleans, Louisiana.

See advertisement page 41

KANSAS, UNIV. OF

Lawrence, Kansas June 6-Aug. 2

Courses—Elementary and advanced basketball; theory and practice of athletic training; and advanced football. Staff—Dr. Forrest C. "Phog" Allen and J. V. Sikes.

Information—Regular summer session tuition.

Director—Henry A. Shenk, Dept. of Physical Education, University of Kansas, Lawrence, Kansas.

KENTUCKY, UNIV. OF

Lexington, Kentucky Aug. 19-16

Courses—Football and basketball. Staff—Lynn Waldorf, Fritz Crisler, Bear Bryant, Ray Meyer, and Adolph Rupp. Information—Tuition free. Director—Bernie A. Shively, Director of Athletics, University of Kentucky, Lexington, Kentucky.

See advertisement page 52 May issue

LOGAN'S TRAINING CLINIC

Pepperdine College Sept. 1-3

Los Angeles, Calif. Courses—All phases of training. Staff—Roland "Kickapoo" Logan, Dr. William Allen, Dr. Harvey Billig, and others to be announced. Information—Tuition \$12.50. Director—Student Health Department, Pepperdine College, Los Angeles, California.

LOUISIANA H.S. COACHES ASSN.

Shreveport, Louisiana Aug. 6-8

Courses—Football, basketball, baseball, and track. Staff—Gus Tinsley, Tommy Mont, Warren Giese, and Ed Hickey. Information—Tuition \$3.00 for active high school members; \$5.00 for non-members. Rooms are free and average cost of board is \$2.00 per day. Director—Woodrow W. Turner, Byrd High School, Shreveport, Louisiana.

NORTHERN MICHIGAN C.S.

Marquette, Michigan July 31-Aug. 2

Courses—Football and basketball. Staff—To be announced. Information—Tuition \$10.00 includes room and board. Director—C. V. "Red" Money, Northern Michigan College, Marquette, Michigan.

MICHIGAN, UNIV. OF

Ann Arbor, Michigan June 23-July 5

Courses—Football, basketball, track, golf, gymnastics, and intramurals. Staff—Bennie Oosterbaan, Ernie McCoy, Don Canham, Albert Katzenmeyer, Newton Loken, and Earl Risky. Information—Tuition \$20.00 resident; \$30.00 non-resident participation; \$50.00 non-resident credit. Average cost of room \$1.00-\$5.00 per day; board \$4.00-\$6.00 per day. Course carries two hours of graduate credit. May be elected for non-credit. Supervisor of Course—Howard C. Leibee, Waterman Gymnasium, University of Michigan, Ann Arbor, Michigan.

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25

WISCONSIN H.S. COACHES ASSN

University of Wisconsin

Madison, Wisconsin Aug. 18-22

Courses—Football, basketball, track, baseball, and wrestling.

Staff—Charlie Caldwell, Ivy Williamson, and Bud Foster. Others to be announced.

Information—Tuition \$5.00 for members; \$10.00 for others.

Director—Harold A. Metzen, 1809 Madison Street, Madison, Wisconsin.

See advertisement page 53 May issue

WISCONSIN, UNIV. OF

Madison, Wisconsin June 30-Aug. 22

Courses—Coaching problems in various sports, elementary and secondary physical education, methods and curriculum, conditioning and health education, recreation, organization and administration, measurement and research studies.

Information—Request graduate catalog for requirements for graduate work leading to a master's degree. For additional information write the director.

Director—Director of Summer Session, University of Wisconsin, Madison, Wisconsin.

See advertisement page 77 March issue

Functional Building

(Continued from page 16)

swer an old question often raised in physical education and athletics. "How can we offer a program for those skilled and at the same time not jeopardize the chances of those who are less skilled?" Should the present student body of 1,800 double, the facilities will still be adequate to meet the needs of all for years to come.

All of the rooms except the two dressing rooms and the handball courts are conveniently located on the ground level. One long corridor with two L turns reaches the following: two classrooms, conference room, faculty dressing rooms, natatorium, eight offices, dressing rooms, custodian's room, field house, rest rooms and foyer. Especially important is the lighting in the gymnasium. There are thirty 1000 watt incandescent lights and five large glass brick windows 10 feet by 20 feet facing north. Air circulation and temperature units, including cooling as well as heating, are automatically controlled. Acoustical arrangements consist of slag block walls and spun glass roof sections. Portable public address equipment is conveniently stored for use in this part of the building.

Gymnasium

The gymnasium, 120 feet by 90 feet, has an automatic partition to make two gymnasiums, each 90 feet by 60 feet for physical education classes. Folding bleachers come out of

the north wall to provide seats for 1200. The gymnasium, designed with the latest innovations and conveniences, is one of the finest in any of the small colleges. Students using the gymnasium have adjacent dressing rooms.

Locker Rooms and Handball Courts

The men's locker room is located on the first floor and the women's locker room on the second floor directly above. These have one outer wall, one wall opening to the gymnasium, one to the field house, and one to the swimming pool. The post office system of handling baskets has been used. Each locker room is equipped with 900 basket lockers. There are 175 lockers in each locker room, which will carry the peak load. A gymnasium store is provided in each locker room.



Illustration above shows the spacious athletic stock room. Notice particularly the depth of the shelves, and the depth and width of the aisles between the bins.

The men's locker room also includes a squad room and a training room complete with training tables, diathermy, whirlpool and therapeutic lamps. There are two locker rooms for the teaching staff, each complete with shower, toilet, and lockers. Beneath the men's locker room are two four-wall handball courts and a large equipment storage room. Included in the building contract were nine hard, outdoor surface tennis courts adjoining the building.

Field House

Because of the climate in Michigan, a field house is essential. The

area of the field house is 263½ feet by 139 feet. The track around the floor is constructed of a 50-50 mixture of clay and screened cinders. This section of the building permits track, large classes in physical education, football practice in bad weather, early baseball drills, varsity and freshman basketball, and minor sports. The new field house has a 10 lap-to-the-mile track with an 88-yard straightaway. An equipment storage room 100 feet by 26 feet, adjacent to the field house, provides ample space in which to store the demountable basketball floor, temporary bleachers, hurdles, and jumping standards. A balcony to seat 1200 people runs the length of the north side of the field house. It includes a modern press box. The basketball floor is the demountable type and there are temporary bleachers with a seating capacity of 4000.

Careful planning of the field house in order to serve many sports throughout the entire year is one of the features of this part of the building. The basketball floor will be put in each year immediately following the last football practice of the fall. Cross country men will be forced indoors due to inclement weather several times during the month of November to use an ever-ready indoor cinder-clay track. Equipment for archery, golf, track, field events, tennis, and a batting cage for baseball provide an all-year, well-rounded sports program.

Lighting

Fifty foot-candles of light 4 feet from the basketball playing floor make this unit one of the best. Conduit heating units, 18 in all, running upward and downward from the catwalk are a guarantee against condensation from the 52 foot roof.

Portable pole vaulting and high jumping pits mounted on pneumatic tires, a special tractor for the daily floating of the running track, and many other pieces of equipment provide maintenance men with sufficient equipment to keep the building in readiness at all times.

Acoustical spun glass sections in the roof are typical of the entire building, making this spacious unit an enjoyable and a pleasant place for contests, as well as for daily work.

Program of Activities and Classes

Health education is a part of the program offered. The curriculum offers classes in personal health, public

(Continued on page 35)

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than any
other
brand



BIKE No. 10 Supporter with form-fit knitted cotton and rayon pouch. Soft, flexible, first choice of coaches, trainers, athletes. 3" waistband, 1 1/4" leg bands.

Coaches, trainers and athletes themselves have helped us design the full line of BIKE Athletic Supporters to meet actual competitive conditions in all sports. So you can depend on the trusted, proved protection YOUR athletes get from BIKE. Remember . . . there's a BIKE support for every sport. And you can recommend BIKE with confidence.

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Illustration 2. The peg board.

PART TWO

(Continued from May issue)

It is believed at Sequoia that American sports offer an unlimited field for development of initiative, co-operation, and leadership. To that end it is felt that every boy must enjoy these privileges regardless of his skills status. The will to win is as strong at Sequoia as it is anywhere else in the nation. In fact, a close study of interscholastic sports results over a long period of years shows this school ranks far ahead of all conference competitors in championships and all-round final standings. This proves two things; first, that a well-rounded physical education program does not detract one bit from varsity sports success; and second, that quite the opposite is the result, in that better teams in all sports for all years is the inevitable product. The slogan which constantly motivates the varsity coaches as well as the physical educators, is: "What else can we do for the boy who does not make the team?"

Facilities and Equipment

A person would naturally expect that such a program would demand a super-deluxe group of facilities. Such is not the case at Sequoia. The gymnasium has long since outgrown its function. It neither seats an adequate crowd nor does it provide space for good teaching stations. Compared with thousands of gymnasiums over the nation, it is woefully lacking. A fine swimming pool helps remove some of the inadequacies of the indoor plant. Both the pool and the gymnasium must be shared with the girls. Outdoors Sequoia is more fortunate, with five basketball courts, five volleyball courts, two handball

Sequoia High School Thirty-One Years of Physical Education

By LOUIS E. MEANS

California State Department of Education

courts, and additional teaching areas, all of which are hard surfaced. In addition, there is the stadium, with a gridiron and track and field arrangement; another sodded play field; a baseball diamond; and a third sodded practice and games field. Two horse-shoe courts, a very complete and carefully conditioned obstacle course, and a paved area which is used for noon-hour activities, equipped for square dancing and net games, together with some bleachers for spectators may be found nestled among the giant trees on the campus.

Inside the crowded gymnasium area we find a small battery of staff offices, which are constantly filled each day with student monitors, record keepers, officials, and the like. On almost every wall in this area one may observe motivation for achievement at its best, with several bulletin boards, trophy and awards displays, team pictures, and more important, pictures of every conceivable type of physical education activity, portraying the efforts of the varsity athlete and student groups alike. Shields and plaques are everywhere, listing permanently the best marks and records of students in every possible event.

While there are no separate rooms and teaching areas for gymnastics and special equipment, the presence of trampoline, gymnastic equipment, ropes, and overhead apparatus is unmistakable. A full-time custodian of the gymnasium equipment rooms and the towel supply is an important adjunct to the program, allowing instructors to give their undivided attention to the students before, during, and after each class. A school laundry is maintained, and the double towel exchange system is used. Mr. Griffin invented several pieces of equipment which are very important elements in the program. One of these is the peg board which is shown in Illustration 2. This board has a series of holes into which pegs are inserted by the student while he is suspended in the air, holding one peg in each

hand. This device is a constant challenge for the boys. The peg board may be found in the gymnasium and also outside on the campus. Boys may be seen pulling away at this unusual test for upper shoulder girdle strength and agility at all hours of the day.

The Physical Education Staff

Sequoia High School employs eight full time men and eight full time women for physical education. Every boy and girl is required to take one full period of physical education daily, which approximates an overall time of 55 minutes. Each staff member for boys has a uniform load. He teaches four physical education classes per day; and is either a head coach or an assistant coach of varsity sports for two out of three seasons each year. This means that each teacher is active with his teams or activity after school until dinner time daily for two-thirds of the school year, with the other third off to do as he desires. Coaching is not considered extra work. Each contract is accepted with a full understanding of the responsibilities involved.

At Sequoia a coach does not have to win to keep his job; but efficient and effective teaching at all times is demanded; yet the very nature of the program guarantees that coaches at Sequoia do win the greater part of the time. The director handles all intramural sports, and arranges for extra-class make-ups for all instructors. The students must call their teachers by nickname only. No class is permitted to have more than 40 boys enrolled, and most classes have nearer 25. At any given hour one may see several classes of "whites," "reds," and "blues" going through their paces. Thus, it is easy to promote any boy from a lower achievement group up to the next group at any given hour in the day.

Numbered roll call stations are marked in nine places on the campus as follows: one in the gymnasium,

two along the football bleachers, two along the baseball backstop, two along the volleyball area, one at the handball courts, and one in the swimming pool. Each boy covers his number wherever the day's station may designate. Special printed forms permit the teacher to complete roll call in one minute.

Each class is called to attention; then to parade rest, and no conversation is permitted for one minute during roll call. Each period is divided as follows:

Dress and at day's station	10 minutes
Roll call	1 minute
Physical conditioning	10 minutes
Announcements	1 minute
Activity of the day	25 minutes
Showers and dressing	10 minutes

All non-dressers are required to report for roll call, and to assume various responsibilities connected with statistics, officiating, and office detail during the hour.

At the start of each year a special "stencil day" is held. On this day each boy marks every piece of his equipment with a stencil which is provided for him. All boys are given a dressing area with others of the same ability. Every entering freshman is a "white." No boy may remain a "white" more than two years. If he has failed to become a "red" in that length of time he is then placed in a special class. Two special classes are maintained.

No boy may become a "red" until he can swim at least 25 yards. In addition to all the other tests which are demanded, "reds" cannot become "blues" until they pass a 50-yard swimming test. Every six weeks new squads are set up, each containing 7 to 12 boys; new squad leaders are elected, as are assistant squad leaders. No boy may be elected a squad leader more than once in four years.

In addition to the three standard groups which are basic, three honorary groups are always ahead for every boy. When certain test results indicate sufficiently high standards, the "blue" becomes a "purple," and eventually, by further attainment, he may become a "gold." Both "purples" and "golds" arrive through physical efficiency attainment. One may become a "silver" through attainment in physical efficiency, plus sports skills.

All boys furnish their own clothing and trunks, except the "purples," "golds" and "silvers" who are presented with satin trunks of those colors which may be worn at all physical education periods as long as the standards are maintained. Sequoia boys strive hard to climb the ladder of achievement, and work for the privilege of wearing these badges of efficiency. In addition, stars are placed

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STAR gym



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Architects Grassold and Johnson. Hillyard floor products used: Wood Primer, Star Gym Finish. Mil-Tone reduces maintenance to daily brush-up.

THESE **HILLYARD** *Features* **HELP BUILD WINNING TEAMS**

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- Light color provides better viewing
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The tough, hard gym finish that made a "Grand Slam" win in '52 on the floors of N.C.A.A., N.A.I.B., A.A.U. Olympic Trials and National Invitational Tournaments. Proved the "Finish for Champions." The reason—Hillyard gym finish is the accepted choice of coaches and players alike—now in use on 15,000 of the nation's finest gyms.

Take a tip from the champions!

Give your floor the Hillyard treatment—do it this summer—be ready for championship action in September.

Hillyard Help—Free on Request

New gym marking chart diagrams court lines. A nationwide staff of trained floor experts (Hillyard Maintainers) on your staff not your payroll.

A TREATMENT FOR EVERY FLOOR

*The Finish
For Champions
For Over 45 years*



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Illustration 3. The human ladder.

upon the satin honorary trunks each time a boy again attains these peaks of distinction which have been set by years of testing and evaluation. If a boy does not maintain the standards at any given testing period he may lose the right to wear the honorary colors, and be demoted to a lesser rank.

Physical Education Grades

Grades are no guessing matter at Sequoia. Every time the squads play a game they receive points for winning, tying, or no points if they lose. An elaborate point system indicates the number of points to be awarded in each sport or activity. Every physical efficiency test is recorded, and grades fall into natural divisions through the results. Attitudes and other details receive minor consideration in grading. At the end of each

grading period every boy's record is in an open book, and there can be no question how the instructor arrived at any grade. Attendance and general participation are scored, and fundamentals tests are given. Special bonus points may be earned in a number of ways. Suit inspection is held bi-weekly. No boy who is willing and anxious to develop and improve need worry about low grades. It will be noticed that top grades are given to all three levels of achievement; to the "whites," "reds," and "blues."

Testing and Evaluation

Testing periods are conducted every October and May. Any boy may repeat any test from time to time. While students may assist with the tests, the instructors supervise them. A test battery has been set up and checked carefully through the years, and it varies for the three groups. It includes such events as pull ups, push ups, rope climb, bar dips, dodge run, shuttle runs, sit ups, Burpee, bar vault, 50 yard, 100 yard, and 150 yard swims, the hop, step and jump, bar snap, leg lift, jump grip, and other events, all adjusted to grade and achievement levels. Standards have been set for all test items, and points are given for performance. Printed forms are available for all testing, and the boys who attain median results in all events are placed on the Roll of Honor.

The Program of Activities

At Sequoia the program is extremely varied, and includes every phase of physical education considered

Illustration 5 shows rope climbing techniques.

Illustration 6. The scaling wall on the obstacle course.



Illustration 4 shows the overhead rope over the swimming pool.

worthy of inclusion. The course of study is completely organized, and a copy of the total program, organizational details, staff and student regulations, and every detail incidental to the program is printed and in the hands of each staff member. The program is outlined in six-week periods, with each week's schedule of activities posted on bulletin boards so that every student will know in advance where he is expected to report, and what activities will be presented. Over thirty activities make up the program.

Aquatics. As stated earlier, every boy must be able to swim a minimum of 50 yards or he does not graduate from Sequoia. This demands that adequate instruction be given to everyone. A section for non-swimmers is held constantly. All strokes are stressed, and water sports are taught and enjoyed. In addition, every boy

(Continued on page 36)



End Play

(Continued from page 22)

Series K—Block on a trap play (pages 10 and 11). The end's block is the same as on a hand-off to the halfback, shown in Series B.

Series M—The left end blocking the defensive tackle in on the right halfback counter off-tackle, against a tight six-man line (pages 10 and 11). In this series the left end takes a short step with his inside or front foot. This step is parallel to the line of scrimmage and he makes contact with his right shoulder, keeping his right elbow even with his shoulder and rigid. Upon making contact, his outside leg has moved and the end is ready to drive his outside foot into the ground and force the tackle down the line of scrimmage.

Series P—Right end using a reverse body block to take a defensive tackle out who is playing head on (page 13). First, the right end takes a step with his right or back foot, forward and slightly to the outside of the tackle. At the same time, he tries to make contact, driving his left shoulder into the defensive man's left leg between the hip and the knee. When the tackle fights resistance, the end quickly slips from a shoulder block to a body block, keeping in close, and whipping his body around so that his feet are headed downfield. He tries to keep both hands on the ground and all of the drive outward comes from his right leg. The end should keep in mind that his buttocks must be kept high enough so that the defensive man cannot reach over and make the tackle.

Series Q—Right end using a reverse body block to take a defensive tackle in who is playing head on (page 14). The right end takes a short step with his left or front foot forward and slightly to the inside of the defensive tackle. He tries to make contact at the completion of this step, driving his right shoulder into the tackle's leg, between the knee and hip. Again he attempts to make the tackle feel he is being taken out. When the tackle fights into the end's block, the end slips from a shoulder block into a body block, head to the inside of the tackle. He then whips his body around, throws his legs downfield, stays in close, and gets all his drive from his left leg. Both of his hands remain on the ground with his buttocks high enough to keep the defensive man from reaching over.



IN FOOTBALL IT'S TEAMWORK THAT SCORES IN UNIFORM FABRICS IT'S QUALITY THAT SCORES

Take a look at the record. Through the years the great football teams have built their reputations on the basis of sound teamwork. Time and again the records show—it's teamwork that scores.



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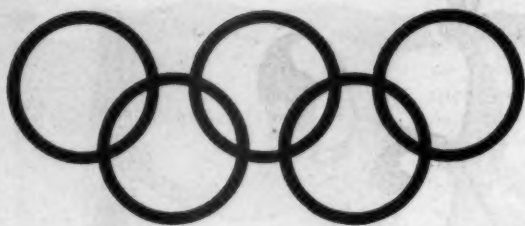
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Olympic Prospects

By H. D. THOREAU

Editor, N.C.A.A. Track and Field Guide

PART THREE

(Continued from May issue)

Thursday's session calls for the hammer throw. This event which was once monopolized by the United States will now be a struggle between the European nations with only one American, Sam Felton, Harvard graduate student, having even an outside chance to reach the gold medal.

The poor showing of the United States in the hammer these days, as well as in the hop, step and jump, 3,000-meter steeplechase, the long-distance races, and the walking derbys may be attributed directly to the fact that those events are not included in the national collegiate track program. The college teams, which furnish 95 per cent of the men on the United States Olympic track squad, are responsible for this country's rating as the No. 1 track nation. Without the college program, we might rate in all events as we do in the hammer, hop-step, and walking derbys.

In the hammer throw Sverre Strandli of Norway should merit the favorite's role over Imre Nemeth, Hungary's world record holder at 196 feet, 5½ inches. The strapping young Norseman has been throwing the hammer over 190 feet consistently. If anyone edges Sverre it will probably be little Imre who won the 1948 title. Imre has apparently reached his peak, but can still show the youngsters a few pointers.

Speaking of oldsters, probable contestants in this revival of the Games will be 44-year old Karl Hein, Germany's 1936 Olympic champion, and 38-year old Henry Dreyer of the United States who placed seventh in Berlin 16 years ago. Both are still 180-footers, in fact Dreyer placed second last year in the United States championships with the best throw of his life, 182 feet, 8¼ inches. Felton, who looks as if he might be Dreyer's son, has a best of 187 feet, 7¼ inches. New Englanders, Tom Bane, Bob Backus, Gil Borjeson, Cliff Blair, and Irving Black, and Manhattan's Steve Dillon are 170-footers.

Let us look at Europe's other 190-footers: Karl Storch and Karl Wolf

of Germany; Teseo Taddia of Italy; Danilo Zerjal of Yugoslavia; and Alexander Kanaki of the U.S.S.R. Zerjal is a comparative novice at throwing the hammer, but he may be a big surprise at Helsinki, if Tito's government removes him from the suspended list in time. He was declared ineligible last summer for non-appearance at an important international meet.

In view of all the evidence, our verdict is: 1. Strandli (Norway); 2. Nemeth (Hungary); 3. Storch (Germany); 4. Wolf (Germany); 5. Zerjal (Yugoslavia); 6. Felton (U.S.A.).

Possibly the most exciting race of the week-long Games, according to European standards, will take place on Thursday afternoon when the finalists in the 5000-meters take off on their jaunt of over three miles. If any American entrants are able to withstand the stiff qualifying heats to be held two days earlier, they may consider their trip to Helsinki worthwhile.

Zatopek, the untiring Czech, will be out to revenge his defeat in this event by Belgium's Gaston Reiff at London in 1948. Even though he will have run a 10,000 final on Sunday and a 5,000 heat on Tuesday, Zatopek will be the heavy favorite Thursday afternoon. Reiff won the Olympic title at Wembley Stadium, in 14 minutes, 17.6 seconds, two-tenths of a second and one yard ahead of Zatopek's driving finish. Since that time the Belgian has pared his time to 14:10.8. In the European Championships in 1950, using a world-record breaking 10,000 and a 5,000 heat as appetizers, Zatopek defeated Reiff before a Brussels crowd with a 14:3.2 race, a time bettered by only one man in history, the world record-holder, Gunder Hagg of Sweden, who ran 13:58.2 in 1942.

Herbert Schade, the young German who is improving, might intrude in this two-man dual between the veterans, if he can lower his 14:15 time. In the second echelon are likely to be Vaino Makela, Hannu Posti, and Vaino Koskela of Finland; Frenchman, Alain Mimoun; Norwegian, Martin Stokken; Bertil Albertsson of Sweden; Russians, Nikifor Popov, and

Vladimir Kazantsev; and possibly the New York FBI agent, Fred Wilt.

Wilt's best time, a 14:26.2 effort run two years ago, is the fastest ever turned in by an American but it has been bettered by a dozen Europeans in the past several years and would leave Wilt over 100 yards behind Zatopek at the finish.

Teen-ager Wes Santee of Kansas is one of America's finest distance prospects, but is too young to expect to stay with the European veterans. Another Kansan, Herb Semper; two ex-Penn Staters, Curtis Stone, and Horace Ashenfelter; Occidental's Bob McMillen; Georgetown's Charles Capozzoli; and Cadet Gil Shea of West Point are other United States runners who might not be lapped by Zatopek. Canada has high hopes for Don McEwen who has been defeating the best United States college distance runners for the past three years while attending the University of Michigan.

Predicted 5,000-meter finishing order: 1. Zatopek (Czechoslovakia); 2. Reiff (Belgium); 3. Schade (Germany); 4. Albertsson (Sweden); 5. Mimoun (France); 6. Wilt (U.S.A.).

The United States should come in for its first strong showing on Thursday's program with the running of the 110-meter high hurdles. In 1948 the Americans took the first three places in this race. The first non-Yankee in that race was Alberto Triulzi of Argentina, and if he has made peace with the Argentine authorities, he is likely to hold the same spot this summer. At present he is attending Santa Barbara College in California. He was at Santa Barbara during the winter of 1951 when the Pan-American Games were held in Buenos Aires. He claimed that he had a bad leg at the time of the Games and, therefore, did not make the trip down to Buenos Aires to represent his country. The Argentine officials did not choose to believe his story and declared him ineligible. After the Pan-American Games he went on to run the 110-meter hurdle distance in 14.0 seconds, the fastest time ever recorded by a non-United States hurdler, twice in behalf of the Santa Barbara College track team.

However, Triulzi was unable to defeat world-record holder, Dick Attlesey, who has hurdled over those ten flights of 3-foot, 6-inch barriers in 13.5 seconds. Triulzi beat Craig Dixon, another Los Angeles boy who has a record of 13.8. Dixon was the third American to beat Triulzi at London. A likely third American in 1952 is Jack Davis, another Los Angeles hurdler who is now attending the University of Southern California. Davis, as a sophomore last season, won the national collegiate title in 13.7, and took four out of seven races from Dixon. No one was able to dent Attlesey's perfect record of two seasons without a loss. Attlesey is representing the United States Navy in the special Olympic Tryouts unit at Annapolis.

The Army also has a top-flight hurdler in training. He is Pvt. Bill Anderson, son of "Rochester" of radio fame.

Art Barnard and Bill Albans, two adopted citizens of Los Angeles, are almost as good as the quartet of native sons previously mentioned. Albans, who has previously called New Jersey and North Carolina his home, also has talent in the broad jump, hop, step and jump, and decathlon, so he might not try the hurdles.

To prove that hurdling is participated in elsewhere in the United States outside Los Angeles, Jack De Medicis of Auburn, Alabama, might break into the southern California monopoly in the final United States Olympic Tryouts. Harrison Dillard, who had to be content with the 100-meter sprint title in the 1948 Games, after a fall in the tryouts ended his hurdle hopes, might also be a contender.

Since each nation is limited to three entries in each event, there are sure to be at least three non-United States hurdlers in the six-man final, even though this country probably has a half dozen men who could beat all but Triulzi. A pair of Australians might wish to argue this point, however. Australians, Peter Gardner and Ray Weinberg have been running nose-to-nose in fast races on grass tracks for the past four years. When they get on a cinder track they should do even better.

Two other contenders were discovered in the Pan-American Games last winter when Estanislao Kocouruk of Argentina and Sam Anderson of Cuba both ran 14.2 behind Attlesey's 14.0. Yevgeniy Bulanchik of Russia has turned in Europe's best hurdle times during the past few years, his top clocking coming in 1949 when



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he ran 14.2. However, Bulanchik participated in the European Championships and could do no better than sixth as France's Andre Marie won in 14.6.

We find it easy to select: 1. Attlessey (U.S.A.); Dixon (U.S.A.); 3. Davis (U.S.A.); 4. Triulzi (Argentina); 5. Weinberg (Australia); 6. Gardner (Australia).

The twelve best steeplechasers in the world will gather at the starting line on Friday in the final of the Olympic 3000-meter steeplechase. The race consists of 7½ laps around the quarter-mile track with four fences and a water-jump to be negotiated on each lap.

Whereas 9 minutes used to be a difficult time for the course, Russian, Vladimir Kazantsev dipped under this time by more than 10 seconds when he finished the chase in 8 minutes, 49.8 seconds, a world-record time. In that race Kazantsev soundly trounced Saltykov and Savenko of the Red Army; Yevseyev, Pomogayev, and Samsonov all good steeplechasers. On two other occasions Kazantsev dipped under 9 minutes to further prove his mettle. Mikhail Saltykov ran 8:57.6, also under the previous world best. These clockings make Kazantsev and Saltykov solid favorites to run first and second in the Games.

Their stiffest competition should come from Petar Segedin of Yugoslavia; Curt Soderberg, Thore Sjostrand, and Gunnar Karlsson of Sweden; Helmut Gude of Germany; Erik Blomster of Finland; and Jindrich Roudny of Czechoslovakia.

The only Americans who appear able to stay with the pace of the above chasers are Curt Stone, Warren Dreutzler, and Bob McMillen. Stone has been clocked in 9:08.6, while McMillen, another student at Occidental College, has improved a great deal since he ran 9:18.7 in qualifying for a place on the 1948 Olympic team. Lieutenant Warren Dreutzler of LaGrange, Illinois, is the national collegiate mile champion.

The choice: 1. Kazantsev (Russia); 2. Saltykov (Russia); 3. Segedin (Yugoslavia); 4. Blomster (Finland); 5. Gude (Germany); 6. Stone (U.S.A.).

Friday afternoon's other final will bring together the world's six best quarter-milers in the 400-meter dash. This event has long been a United States stronghold, but it is currently being dominated by the little island of Jamaica in the West Indies. Jamaicans Arthur Wint and Herb McKenley ran first and second in the 1948 400-meter final, and both will undoubtedly be around this year to

try again. However, it appears as if neither will win because of a third and even better islander, George Rhoden.

Wint is co-holder of the Olympic record for 400 meters at 46.2 seconds. Rhoden holds the world record for the distance at 45.8 seconds, and McKenley holds the world mark for the English equivalent distance, 440 yards, at 46.0 seconds, to show how complete has been their domination of the event in recent years.

Since McKenley attended Boston University and the University of Illinois, and Rhoden attended Morgan State College, both boys have done most of their running in this country, but in the Olympic Games they must represent the country of their birth. Wint has been studying medicine in England for the past five years.

The United States has a number of good 400-meter men, but apparently not one is capable of keeping up with the boys who will be wearing the colors of Jamaica. Between them, McKenley and Rhoden have won this country's national 400-meter title for five of the last six years and the national collegiate title for four of those years.

Two of America's best quarter-milers, Mal Whitfield and Charlie Moore, will be aiming for Olympic titles in other events and may choose to pass up the 400. If this is the case, our representatives will probably come from among Ollie Sax of Kearny, New Jersey; Vernon Dixon of Manhattan College; Dick Maiocco of New York University; Jim Lingel of Cornell; Gene Cole of Ohio State; Eddie Macon of the College of the Pacific; Ollie Matson of the University of San Francisco; Gary Green of Los Angeles; and Sherman Miller of Occidental.

Five of the other top quarter-milers in this country's collegiate ranks are also imports who will be running under the colors of their homelands at Helsinki — Jim Lavery and Jack Carroll of Canada; Morris Curotta of Australia; and Panama's Cirillo McSween, Clayton Clark, and Sam LaBeach, younger brother of Lloyd, the professional sprinter.

Derek Pugh of England; Karl Haas and Hans Geister of Germany; Gustavo Ehlers of Chile; Leon Gregory and Eddie Carr of Australia; and Schalk Booysen and Louis van Biljon of South Africa are the world's other good 400-meter men who will probably be sitting in the stands viewing the finals after being eliminated in the three rounds of heats.

We see the race in this manner: 1. Rhoden (Jamaica); 2. Wint (Jamaica); 3. McKenley (Jamaica); 4. Sax (U.S.A.); 5. Cole (U.S.A.); 6. Curotta (Australia).

We might mention that the Russians will be no factor in the 400. High school boys in this country have run the distance faster than the new Soviet record of 48.3.

Friday will also see the running of the first five events of the decathlon, the all-around test of track and field ability which includes 10 events. The second set of five will be run off Saturday morning and afternoon.

At this writing six men appear to stand out in the decathlon although 30 or 40 will probably enter the competition. In discussing these contenders we refer to their past performances according to the new decathlon scoring table which is being introduced this year.

First and foremost is Bob Mathias, the defending champion and world record holder, who won the title in London as a 17-year old high school graduate, by defeating the best all-around athletes in the world. Mathias scored only 6,389 points in capturing the Olympic title, but two years later in the United States championships he tallied 7,443 points, thereby surpassing the previous world record by over 100 points. In the two years that have elapsed Mathias has continued to improve in the individual events in which he has been competing, leading one to assume that he will be in the vicinity of 7,900 points when all ten events have been added together in the twilight at Helsinki on Saturday.

All contestants compete in the same ten events during the two days, with each of their performances being translated from seconds, or feet and inches, into a specified number of points according to an international table.

The other five contestants who are likely to be within shouting distance of Mathias are Heino Lipp of Russia; Orn Clausen of Iceland; Ignace Heinrich of France; and America's two other entrants, whether they be Bob Richards, the famed pole vaulter, Bill Albans, Floyd Simmons or Bill Miller.

Lipp, who specializes in the weight events, scored 7,072 points four years ago and may be able to achieve that total again or go even higher. He is the pride and joy of the Russian track experts and they would be delighted to see him defeat the proud Americans, but his efforts will prob-

(Continued on page 40)

A Functional Building

(Continued from page 26)

health, methods and materials in health education, first aid, anatomy, physiology, kinesiology, and an adapted program for the handicapped. Fine facilities are available for audio-visual education in this connection. The college health committee meets in this department regularly.

Health and Physical Education

Advancement of a great number of phases of health, physical education, recreation, and athletics in the new plant consists of corrective or restrictive activities, volunteer activities, intramural athletics, teacher education in health and physical education, health supervision, health service, health instruction, and freshman and varsity sports. Since space and equipment have been added, creative committees have continued to study problems significant to the college physical education and health program for a wider distribution of activities, together with a greater extension of health and physical education. Co-ordination of the health program with the rest of the college program has reached a very high level of efficiency as a result of a continuous series of studies and projects over the past several years. There is a strong collaboration with this department on the part of the health service unit housed in an adjacent building.

Intramurals

For the first time the college has adequate facilities to carry on a complete, well-rounded program of intramural activities. The building has been turned over to the intramural director at 7 o'clock every night except Friday and Saturday for this program. This gives ample time for the scheduling of contests, as well as practices without crowding in basketball, volleyball, badminton, handball, wrestling, paddle ball, foul shooting, swimming and diving, track and field, archery, table tennis, and horseshoes.

All teams for men's sports are organized by individuals and held together by a team manager. All managers must be major or minor students in the Department of Health and Physical Education. Intramural athletics are under the control of the director of intramural athletics and are governed by the Intramural Board, consisting of five members, including the head of the Physical Education Department, director of intramural sports, senior manager, and two students.

Pool

Life saving and water safety courses have long been popular and adequate pool facilities are available. An 18 foot canoe, a large number of paddles, and other equipment are available so that waterfront responsibilities may be taught. The pool at Central serves a dual purpose in that both the men and women have the use of it for instructional purposes and for recreational swimming. During the regular class periods, separate classes are conducted for men and women in beginning and intermediate swimming. Advanced classes in life saving, swimming, and diving are co-educational. The pool is open for college recreational groups every day including Saturdays. In addition, the college conducts a swimming program for its laboratory school grades one through eight, and the faculty has the use of the pool once a week. When there is time, outside groups have the use of the pool when permission is secured.



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Visual Aids

(Continued from page 18)

projection used to be a big problem. Now, however, there is a newly-developed screen available which permits excellent projection in broad daylight.

If the school has a camera club, or if there is an amateur photographer on the faculty or in the student body, homemade movies should not be overlooked. They are inexpensive to produce, and a great deal of fun to make. Exactly the type of material which is desired and needed may be filmed. Also, if the movies are well done, they may be used to publicize the physical education program by showing them to local clubs and to other interested groups. Filming actual games also gives the coach additional teaching and instruction material.

Film Loops. A film loop is a section of motion picture film showing one particular skill or technique. The ends of the film section are spliced together to form a loop of the whole film. Placed in a projector, the film will show the action over and over again, so that students may study and practice it for as long as necessary, always with the same action to guide them. Few, if any, film loops are sold commercially in this country, but they may be made locally by the school camera club or anyone who has a motion picture camera.

Slidefilms and Slides. Slidefilms and slides offer the instructor an excellent aid to teaching, since they permit one technique or action to be projected for any desired length of time. The instructor is then free to discuss the action for as long as he deems necessary. The Athletic Institute has a good series of slidefilms, and other slidefilms and a few sets of individual slides are put out by commercial organizations. Special projection equipment is needed for both slidefilms and slides, but many schools already have this equipment. If not, these projectors are not too expensive, and are valuable for any school to own.

Slidefilms and slides may also be made locally with a minimum of expense. A 35mm camera is the only major equipment needed to produce them.

Still Pictures, Charts, Graphs, etc. If properly employed, the bulletin board may serve very well. Homemade or commercial photographs or pictures, charts and diagrams clipped from newspapers and magazines, training or conditioning hints, pictures of equipment, rule condensations—all can be placed on the bul-

letin board to pep up a program and provide the student with a constant reference and study point. With a minimum of effort, a series of valuable posters may be built up. These can be used over and over again. Or, the task can be given to the students as a class project. A coach should never have an empty bulletin board. He should keep it filled with materials on the activity being taught.

Opaque Projectors. An opaque projector is a device which projects non-transparent materials—like the page of a book, a picture from a newspaper or magazine, etc. They are expensive to buy, but are valuable in that they have a wide range of academic uses. They may be used to show small printed or graphic material to a large group, thus increasing the range and variety of visual materials. Opaque projectors are also useful for testing the students on nomenclature, techniques, rules, etc.

There is nothing at all mysterious or magical about audio-visual education. It is simply using pictures in telling a story, and is actually one of the oldest forms of communication known to man. A coach can incorporate audio-visual aids into his teaching program with a minimum of expense and effort. Their possibilities are virtually unlimited. Properly used, and that is easy to do, they may greatly increase the effectiveness of a teaching program.

Sequoia High School

(Continued from page 30)

receives survival instruction in swimming while clothed, coping with oil, rescue carries, survival tests, life saving, and overhead rope work in the pool. In addition to the rope work and swimming while clothed, a regulation landing net is used at various times.

Gymnastics, Tumbling, Apparatus, and Trampoline. A great variety of stunts, exercises, and activities are taught in this area, but only as an integral part of the total broad scope of activity. Six trampoline units are available for concentrated teaching and practice. Most other forms of equipment form a part of the year's schedule. Special emphasis at Sequoia is placed on instruction and practice in rope climbing, and rope safety techniques. Illustration 5 gives some idea of the type of teaching that accompanies rope work. Every boy learns to be at home up in the air on a climbing rope, and he may remain in the air indefinitely by means of the various safety techniques, or he

can come down speedily and safely on occasion. Mr. Griffin has received scores of appreciative letters from former graduates who owe their lives to lessons learned on the ropes and mats, as well as the fine upper shoulder girdle muscle development which accompanied these lessons. Frequent public demonstrations popularize this form of physical education to the public and to the students.

The desire to excel physically in this phase of the program is best proven by the fact that it is almost impossible to walk about the Sequoia campus without seeing at least one or two boys hanging from overhead ropes, chinning themselves, or walking hand-over-hand on outdoor parallel bars, or working away at the peg board. This seems to take place at every hour in the day, especially during the noon hour, and before and after school.

Conditioning Activities. Ten minutes each day are given over to events in this category. This work may include something from three areas: (1) exercises, grass drills, and sprints; (2) ranger exercises; and (3) obstacle course. For the exercises, drills, and sprints the class is spread in formation style, and squad leaders are used extensively in the conduct of rhythmic exercise through continuity leadership. Each event is named, and all of the students are familiar with each execution. Ranger exercises are done in circular formation, usually in the gymnasium, where the instructor uses the loud speaker (installed in the wall) to obtain quick reflexes by command. Leaders are rotated constantly.

The obstacle course is built under the giant campus trees and has 13 obstacles. While there may be some discussion regarding the use of this device during peacetime, the Sequoia course is used every day. The commendable feature of this course is the fact that each obstacle is made up of three units. Each unit has a greater degree of difficulty; one for "whites," one for the "reds," and the most difficult for the "blues." Illustration 6 shows the scaling wall, with three different heights. Each of the sections is painted a brilliant white, red, or blue, so that each group will know which obstacle to use. The whole layout is a colorful device, and stress is placed on overhead work for further development of the shoulder and arm muscles. Most difficult is the "atomic loop" which is an additional feature, and includes much hand-over-hand walking on suspended ropes.

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Sports Fundamentals. A regular part of the schedule on many days is the instruction in sports and games fundamentals. Students are also graded on this phase. This instruction includes all popular sports, as well as skills in boxing, wrestling, peg board, etc.

League Games. Part of every day's schedule includes participation in activities. These activities consist of sports such as flag football, basketball, softball, track and field events, soak out, volleyball, handball, and speedball. Squads make up the teams on rotating schedules. The scores are recorded, and all scores figure into the point system and final grading.

Stunts and Relays. Squad scoring is also recorded in many relays, such as the myriad of basketball relays, Jump Stick, Izzy Dizzy, Leap Frog, Crab Run, Skin the Snake, Wheelbarrow, etc. Tug-of-War is another occasional feature.

Intramural Sports

Tournaments and leagues are conducted in many individual, dual, and team sports on a voluntary basis for all boys. Some events grow out of an interclass organization, others from the Cherokee League, and many are just individual tournaments such as golf, tennis, horseshoes, and similar events. While a person might be tempted to feel that the Sequoia program is a bit weak on the intramural side, it must be remembered that every boy receives more intensive physical instruction and participation daily in this program than he would in most programs.

Interscholastic Sports Program

Sequoia High School is particularly proud of its interschool athletic record over the past many years. The program, broad in scope, attempts to provide every boy who has a desire for that type of competition a team on which to play. Every member of a varsity team is a daily participant in physical education classes. There are no exceptions whatever, except on the day of a game. On these days varsity athletes report to the physical education class and assist in detail work, but are not suited up. The coaches have come to feel that varsity squads are stronger and better conditioned by this method, and are the strongest supporters of the idea. No preliminary conditioning exercises are needed for varsity sports with this system, and more time may be devoted to team fitness. Varsity

competition is arranged in football, frosh-soph football, basketball, frosh-soph basketball, golf, water polo, swimming, track and field, and tennis. Large squads are maintained in every sport. An elaborate system of certificates and awards has been worked out, with appropriate displays of letters framed on the gymnasium walls.

The interscholastic athletic program provides students a rightful place in management with the Board of Athletic Control. This board is composed of the director, a secretary appointed by the director, one representative from each academic class, the head cheerleader, the president of the "S" Club, a publicity manager, representatives from each class color group, and the captains and managers of each team. Meetings are held twice monthly, or on call. Discussions center around the entire physical education program, including intramurals and varsity sports. Resolutions on varsity sports are referred to the Board of School Commissioners, while resolutions concerning the physical curriculum and intramurals are referred to the director for action. Motion pictures on sports performances are usually shown weekly. Separate budgets are prepared by each varsity coach, and submitted for joint approval annually. A large proportion of Sequoia boys find their way on to varsity squads before graduation.

Special Features

Happenings on the Hemp. This is a special bulletin which is posted quite frequently, and it motivates rope work achievement, stressing individual performances, etc.

What's Doing. This is a daily bulletin which is posted on all boards, and it carries the day's highlights in classes, intramural sports, varsity schedules and practice, and all kinds of special coming events, such as movies, trips, sports demonstrations, visitations, co-recreational events, etc. A printed heading sheet in various colors is used to attract attention.

Attitude of the Coaches. The casual visitor might wonder just how the varsity coach of this staff feels about this kind of a program. We have visited the campus several times, wondering if it might not be possible to catch the program "off guard," but the machine moves from day to day with clock-like precision. Every coach and staff member is unusually enthusiastic about his share in the program. Each one feels that it is not necessary to wait until varsity practice each day to enjoy the satisfaction

received from watching solid work and progress.

Visitations from Colleges and Other High Schools. It is a rare week when several visitors do not arrive from some school in California to see this program in action. Students who are majoring in physical education at Stanford University, San Jose State, San Francisco State, and other colleges nearby make regular visits for inspection purposes. This past year many leaders from foreign nations have been sent to Sequoia High School to see the type of physical education which is produced there.

Use of Students as Leaders and Assistants. Monitors supervise towel exchanges with the custodian, supervise locker rooms, protect personal items and report on open lockers, place warning slips inside these lockers, collect all loose equipment, care for bulletin boards, keep score in league games, and generally assist where needed. Other students serve on boards, as officials, and a large number of them handle all the office detail, cumulative record cards of every student, point systems, school and local publicity, and other details. Each teacher is assigned a student secretary who gives considerable time to office detail.

General. Many other features too numerous to mention crowd into the Sequoia program. The Roll of Honor undoubtedly stimulates each boy to greater effort. Athletes and others alike may attain recognition. Certificates are given for all outstanding performances. The sports decathlon is another device which attracts additional physical conditioning and competition, and points are given each boy for efforts in this activity. The general morale and school spirit generated by a program that seeks constantly to safeguard for every boy equal rights and privileges to health, sports participation, achievement, and success is unmistakable. The place is a veritable beehive from morning to night. The city recreation director is wondering continually why he cannot use the facilities at night, but to do so he would have to start a program after 9:00 P.M. in order to avoid conflict with school recreation.

Special sports clubs are also functioning in bowling, chess, rifle shooting, and many hobby activities. When school ends in June, it is not the signal for three months closed shop. The program for all, using all facilities, merely steps up in tempo. Regardless of how one might attempt to evaluate this fine program, an actual visitor cannot help be tremendously

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Olympic Prospects

(Continued from page 34)

ably fall short.

Heinrich and Clausen, the European champion and runner-up in Lipp's absence, have been improving steadily, and last year boosted their best scores to 6,780 and 6,884, respectively. Heinrich was second in 1948, behind Mathias, and ahead of Simmons. He is a 6 foot, 5 inch Alsatian who has tremendous potentialities.

Surprise decathlon prospect is Bob Richards, who tried the event for the first time last spring. Four months later he won the United States title with an amazing score of 7,238 points, a total that had been exceeded only by Mathias, and the former world record holder, Glenn Morris of Denver. Richards has been in constant training ever since and is almost sure to surpass Mathias' existing mark.

Albans and Simmons are both former University of North Carolina students, both hurdle specialists, and had identical best marks, 7,361 points, under the old scoring table. When these performances were re-evaluated using the new scoring table, Albans came up with 6,912, to 6,689 for Simmons, which shows what a difference the new table makes. Albans is confident of scoring 7,500 points under the new system and Simmons is confident of making the Olympic team again. When these two boys get together with Mathias and Richards to vie for the three places on the American team in the United States Olympic Decathlon Tryout Meet in Mathias' home town, Tulare, California, it may well be as interesting as the Olympic decathlon itself. Also battling for those three decathlon berths will probably be Miller, the javelin thrower; Otey Scruggs, Harvard graduate student; the Navy's Brayton Norton; and Jesse Thomas, former Michigan State football star.

Lipp will doubtless be accompanied by a pair of capable teammates, Vladimir Volkov and Pyotr Denisenko. Sweden will have on hand Kjell Tanner and Goran Widenfeldt, the latter is attending the University of Washington. Armin Scheurer of

Switzerland; Enrique Kistenmacher of Argentina; Peter Mullins of Australia, currently studying and playing basketball at Washington State College; Josef Hipp of Germany; and Miroslav Moravec of Czechoslovakia are other probable entrants who are able to better Mathias' 1948 total.

Here are our selections: 1. Mathias (U.S.A.); 2. Albans (U.S.A.); 3. Richards (U.S.A.); 4. Lipp (Russia); 5. Clausen (Iceland); 6. Heinrich (France).

The decathlon activities Saturday afternoon will be held up for about 15 minutes while the world's best milers come out on to the track for the running of the Olympic 1500-meter run. The field in the "metric mile" will be scaled down to 12 by a round of qualifying heats on Thursday. Out of that final race might well come the long awaited "4-minute mile" in the form of its equivalent at the somewhat shorter 1500-meter distance which would be approximately 3 minutes and 42 seconds.

The leading contenders for this coveted title are a tall Oxford pre-medical student, Roger Bannister; a former Yugoslavian soccer football star, Andrija Otenhajmer; Sture Landqvist, a slim Swede; Willi Slijkhuis of the Netherlands; the Algerian Patrick El Mabrouk; Australia's Don McMillan; another Swede, Olle Aberg; England's Bill Nankeville; Finland's Ilmari Taipale; and maybe America's Don Gehrmann.

Considering physical equipment, it would seem that Bannister would be the winner, but he was upset last summer in Belgrade by the fast-improving Otenhajmer in 3 minutes, 47.0 seconds, and might be defeated again. Landqvist ran the world's fastest 1500 meters in 1951, in 3 minutes, 44.8 seconds (equivalent of a 4:02 mile), but he does not appear to have the finishing kick necessary to breast the tape ahead of Slijkhuis, El Mabrouk, Otenhajmer, and Bannister. Slijkhuis, an aging veteran of 30, won the European championships in 1950 and a year earlier ran 3:43.8, less than a second off the world mark held by Gunder Hagg and Len Strand. Perhaps he still has enough sting in his famed finishing kick to take home a gold medal.

America's only hope in this event will be if Gehrmann continues his comeback. Warren Druetzler, formerly of Michigan State; Len Truex of Ohio State; and Bob McMillen of Occidental might make the Olympic team and might conceivably run their way into the final, but it is too much to expect them to place in the top six.

Our six predicted place-winners are: 1. Bannister (Great Britain); 2. Slijkhuis (Netherlands); 3. Otenhajmer (Yugoslavia); 4. Landqvist (Sweden) 5. Gehrmann (U.S.A.); 6. El Mabrouk (France).

The final day of track and field competition in the 1952 Olympic Games will be Sunday, July 27. At 3:00 P.M. a group of marathon runners will start out from the Olympic Stadium on the 26-mile, 385-yard grind that will bring most of them back into the stadium about 2½ hours later.

A glance at the 1948 Olympic marathon results will show the futility of attempting to pick the possible winner of this grueling grind. None of the half dozen pre-race favorites in 1948 finished among the first ten and three did not finish at all. However, there are several runners who are expected to finish near the front this time. On a basis of comparative times, Chos Yoon Chil of South Korea would be the favorite. He ran the fastest marathon ever recorded last October in Kwangju, 2 hours, 25 minutes, and 15 seconds. There is no official record for the race, since every course has a different terrain. However, Chos Yoon Chil may not be able to make it to Helsinki, due to existing conditions in Korea. Other favorites will be Gustaf Jansson and Gosta Leandersson of Sweden; Vikko Karvonen of Finland; Charles Cerou of France; 45-year old Jack Holden; and newcomer J. H. Peters of England; Japanese youngster Shigeki Tanaka; Feodosiy Vanin and Vladimir Gordienko of Russia; and the 1948 champion Delfo Cabrera of Argentina.

The United States will have three entrants in the race who will do well to finish in the first dozen. John Lafferty, Tom Crane, Lou White, Johnny Kelley, Bob Black, Vic Dygall, Jesse Van Zant, and John Doherty are the likely suspects.

No finishing order can be predicted in this ordeal.

From the snail's-paced marathon we turn to the hare's-paced 400-meter relay. Since the United States is expected to take most of the top places in the 100-meter dash, its four best men running in succession in the 400-meter relay should also come out on top. Germany and Russia will also have well-balanced teams in the 400-meter relay, but they do not appear to be able to stay up with the swift Americans. Great Britain, with McDonald Bailey running the anchor leg, should get into the final without



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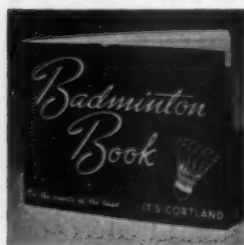
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trouble. The other two final lanes might be occupied by Italy, France, Hungary, Sweden, Canada, Australia or Iceland.

Our opinion: 1. U.S.A.; 2. Germany; 3. Russia; 4. Great Britain; 5. France; 6. Hungary.

This race will be followed by the equally exciting 1,600-meter relay final, in which each man on the four-man teams runs one lap (400 meters) before handing the baton to his teammate.

A quick look back at the 400-meter survey shows that Jamaica should run away and hide from the other nations in this event. If so, it will only be the third time since this event was added to the Games program in 1912 that the United States has not won the race.

At London four years ago Jamaica and the United States were engaged in a close race when Arthur Wint pulled up lame, thus enabling the United States to win in a breeze. Provided there is no repeat of this accident the West Indies team should have little difficulty defeating the best United States quartet of quarter-milers.

Great Britain, Germany, Canada, Australia, Italy, Panama, South Africa, Sweden, and France should also field good teams, but the best team will probably be 60 yards behind Jamaica at the finish line.

Our choices: 1. Jamaica; 2. U.S.A.; 3. Germany; 4. Great Britain; 5. Canada; 6. Italy.

Therefore, of the 22 men's track and field events (including two walking races which we have not included in this survey) on the Olympic Program at Helsinki, 11 of them may be expected to go to the United States with the remainder of the world dividing up the other eleven. This maintains the United States tradition of winning about half of the events on the program.

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Wisconsin's Backfield Play

(Continued from page 20)

In Series A, the hand-off, the quarterback comes out directly with a short lead step, then a cross-over, and places the ball firmly on the right halfback's far hip. We eliminated the spin by the quarterback because it was found that the direct hand-off was much easier and safer. After giving the ball, the quarterback should not look at the ball-carrier, but should fake a toss to the left halfback. The right halfback does not look at the ball, but watches for the hole to open outside his right tackle. We stress that ball-carriers should always run with their eyes open. On looking closely, it will be noticed that most ball-carriers close their eyes the moment they expect to be hit. Many times a back may pick up extra yardage by keeping his eyes open. The fullback takes a lead step toward the sidelines, fakes for the ball, runs low, and drives off-tackle. The left halfback circles deep to the right with his hands extended as if he were going to receive the ball from the quarterback.

Series C shows the off-tackle play with similar operations by the backfield. The quarterback moves the same as he does on the quick-opener, but keeps the ball close to his body with his right hand while hand faking with his left. He then steps back and gives the ball to the left half. The right half drives low and hard, clearing as close as possible with the quarterback, and fills in behind the pulling right guard. His most important job is to get his head and shoulder beyond the defensive left guard and cut him off. The center is throwing his body to the right at the same time to help with the block. The fullback leads the play and is assigned to block the linebacker in the hole. He should get his eyes on the man he is to block, run low, and literally blast into him with either shoulder. If the linebacker is not in the hole, the fullback should turn to the inside and throw a cross-body block. The left half follows as close to the fullback as possible and should cut off his block. The ball exchange from the quarterback is exactly the same as on the hand-off.

The third play, as shown in Series E, is an end run. On this play the quarterback may make a more deliberate fake to the right halfback be-

cause he has more time to get the ball to the left halfback. A very good trick used by most experienced quarterbacks is to watch the halfback drive into the line after the fake. He then tosses a two-handed, underhand pass to the left halfback. We like the basketball type pass because we think it is easier to throw and handle. The fullback's job is to block the left defensive end. If the end crashes, the fullback should aim for his outside hip and leg with a cross-body block. Aiming for the outside leg helps to get the fullback's head and shoulders beyond the end. If the end plays wide, the fullback must stay on his feet and drive the end on out with a running head and shoulder block. The left halfback is told to "watch the ball into his hands" and use all his speed to get around the end.

Series G, H, J, and L show another set of straight T plays based on a fake to the fullback. (Series H, J, and L appear on pages 10 and 11).

Series G shows the basic play and is a fullback hand-off inside tackle. The entire operation of the play is the same as that shown in Series A, with the fullback and right halfback changing assignments.

Series H shows an end run which is designed to pull the end in to set up a block for the right halfback. The fake between the quarterback and fullback is very important and is generally referred to as a ball fake. The quarterback takes a lead step and angles back about 45 degrees from the line of scrimmage, and with a firm grip on the ball places it into the fullback's mid-section. The fullback folds his arms as if he were taking the ball, but makes certain that the quarterback has enough room to slide the ball out. During this maneuver the fullback takes about one or two steps, and conceals the ball from the left defensive tackle and end. The quarterback must be careful to remove and toss the ball before the fullback gets too close to the line of scrimmage. Then the left halfback circles back to receive the ball. The right halfback should try to hook the left end with a cross-body block.

Series J shows a trap of a left defensive guard and has been a very successful play. The right halfback is assigned to block the left defensive halfback by going outside his own tackle and inside the end. Because this is not possible all of the time the right half has to sneak through the first opening he can find and drive downfield for the block. On this block he should get as close as possible and throw a high body block, making certain to get off his feet. If the defender retreats, we tell our

blockers to get off their feet and roll. This often keeps the defender busy while the ball-carrier runs by. The ball-handling by the quarterback has to be quick. After faking to the fullback he must pivot on his left foot, bring the ball back and give it to the left half, who should be approximately even with the quarterback's position at that time. The left half takes a lead step parallel with the line of scrimmage and then cuts directly toward the center's right hip. The lead step to the right is to get a better angle into the hole, but most important, to delay the left half so he does not run into the left guard, and to let the quarterback get the ball back to him safely.

Series L shows a check or counter play. The fullback drives inside tackle, faking for the ball, while the left halfback gets depth while running to the right faking the pitch-out. Then the right halfback makes a head and shoulder fake and takes a short lead step to the right. This maneuver is sometimes called a delay or stutter step and is used so the right guard can pull to get ahead of the play. After delaying the start with the stutter step, the right halfback should get the ball from the quarterback about behind the offensive center and follow the right guard off-tackle to the left. The ball-handling is fairly simple for the quarterback because he has more time to operate and for that reason the fake should be a good one.

On pass protection we have the guards, rather than the backs, block the defensive ends. This is done because the guards have a better angle and are usually better blockers. The backs then fill the hole left by the pulling guard. Against a six-man line or even defense (Series N), (page 12), the back has to block the defensive guard. He should take a couple of steps forward, stay low, and break the guard's charge with a shoulder block. We tell the backs to stay on balance and work the man to the outside. The center is a free blocker and he will throw his block in a direction to help the halfback. The fullback must always take his man alone. If the guard should start to get free, the back should drop quickly across the rusher's knees with a body block. Against an odd defense with no one on the guard, (Series O), (page 12), the halfback is free to be an extra pass receiver. The fullback is a free blocker looking to pick up the first rusher who gets free. He should fake for the ball as the quarterback drops back, stay low in a ready position, and swing his eyes back and forth across the line of scrimmage.

INDEX FOR VOLUME THIRTY-TWO

A

Allen, George H., Defending the Running Pass	32- 1-28
Allen, George H., Defending the Running Pass	32- 2-36
Anderson, Charles E., Raise Those Shooting Percentages	32- 3-26
Anderson, Charles E., Golf in the Small High School	32- 9-42
Anderson, Frank, Working With Weight Men	32- 7-48
Armstrong, Ike, Restoration of Athletic Fields by Aeration	32- 1-56
Athletic Fields, Restoration of, by Aeration	32- 1-56

Ike Armstrong

B

Baley, James A., Beginning Triples Balancing	32- 6-10
Baley, James A., Intermediate Triples Balancing	32- 7-12
Baley, James A., Advanced Triples Balancing	32- 8-16
Bank, Theodore P., Visual Aids in Physical Education	32-10-18
Baseball: Backstops, Movable	32- 6-22
Baseball: Bunt, Simplifying the	32- 7-26
Baseball: Pitches Types of	32- 7- 6
Baseball: Pre-Season Indoor Drills	32- 5-40
Baseball: Stanford Pitching Chart, The	32- 9-34
Baseball: Throw the Stealers Out	32- 6-24
Basketball: Basket Is Big, The	32- 2-50
Basketball: Basketball Drills	32- 2-30
Basketball: Basketball Fundamentals for the Physical Education Classes	32- 5-12
Basketball: Basketball Organization	32- 2-20
Basketball: Basketball Trends in North Dakota	32- 4-24
Basketball Championships, 1952 State	32- 8- 8
Basketball: Defense, Back to	32- 2-22
Basketball: End Line Options	32- 3-30
Basketball: Free Throw Line, An Offense from the	32- 3-18
Basketball: Full Court Press, Applying the	32- 4-20
Basketball: Good Defense for More Wins, A	32- 5-26
Basketball: Guard Play	32- 3-28
Basketball: High School Basketball, The Psychological Aspects of	32- 6-13
Basketball: Kinert Press, The	32- 4-14
Basketball: Lanier's Winning Offense	32- 3-24
Basketball: Offense or Defense Responsible?	32- 6-12
Basketball: Pressing Sliding Zone, The	32- 4-33
Basketball: Revolving Offense	32- 4-16
Basketball: Seton Hall's Set Offense	32- 3- 7
Basketball: Shooting Percentages, Raise Those	32- 3-26
Basketball: Tournament Preparation	32- 5-34
Basketball: Tulane's Pivot Continuity	32- 4- 6
Basketball: 2-3 Sliding Zone Defense, The	32- 5-13

Jay McWilliams

Basketball: We Beat Ourselves	32- 3-36
Basketball: Winning Attacks	32- 4-13
Basketball: Zone Hysteria	32- 5-11
Basketball: Zone Variation, A	32- 5-28
Beaudry, Charles E., Fartlek and European Superiority in Distance Running	32- 7-22
Beckman, Edwin J., A Good Defense for More Wins	32- 5-26
Bennett, Bruce L., Fundamental Kicking in Soccer	32- 3-32
Bennett, Lyle, A Functional Building for Physical Education, Recreation and Athletics	32-10-15
Billett, Ralph E., Dodgeball — Eleven Varieties	32- 1-46
Bolt, Donald Ben, One Way Football	32- 2-34
Books, New	32- 1-54
Books, New	32- 2-42
Books, New	32- 3-54
Books, New	32- 4-32
Books, New	32- 6-46
Books, New	32- 8-51
Bruhn, Milton, Wisconsin's Line Play	32-10- 9
Buck, Selby, Lanier's Winning Offense	32- 3-24
Bunn, John W., Zone Hysteria	32- 5-11

C

Chuck, Edward M., A Zone Variation	32- 5-28
Clagg, Sam, Psychology of Teaching an Offensive Number System	32- 7-50
Clagg, Sam, Psychology of Teaching an Offensive Number System	32- 8-34
Coaching School Directory	32- 8-40
Coaching School Directory	32- 9-32
Coaching School Directory	32-10-24
Coleman, Chink, Defense Against Pass Patterns	32- 1-32
Coleman, Chink, Call and Rule Blocking	32- 2-38
Conn, Julius, The Psychological Aspects of High School Basketball	32- 6-13
Crawford, Denver J., Maryland's Split T Formation, Line Play	32- 1-15

D

Davis, W. Hughes, A Unique Type of Championship — The Flight System	32- 9-26
Day, Kenner S., Back to Defense	32- 2-22
Dean, Everett S., The Stanford Pitching Chart	32- 9-34
Deckard, Tom, Relay Racing	32- 6- 6
DeGroat, H. S., Movable Backstops	32- 6-22
DeGroat, H. S., Simplifying the Bunt	32- 7-26
Dodgeball — Eleven Varieties	32- 1-46
Doherty, J. Kenneth, How to Run the 440	32- 8-26

E

Easton, Bill, Training for Cross Country	32- 1-26
Editorials:	
Airing the Linen in Public	32- 4-18
Athletics 1951-1952	32- 1-22
Baltimore Shows the Way	32- 2-16
Care of Athletic Clothing	32- 6-55
Carry-Over Sports Not Sports of a Carry-Over Value	32- 7-79
Coaches in Camping	32- 7-79
Football at Maryland	32- 1-87
Our Football Offense	32- 5-68
Report on Spring Football	32- 9-18
Results of the N.C.A.A. Restricted Television Plan	32- 6-16
Revision of Excise Taxes	32- 3-59

Screwball Error	32- 8-63
Sportsmanship	32- 2-16
Spring Football Practice — A Cause of Overemphasis?	32- 4-18
Support the Olympics	32- 5-63
Visual Aids in Athletics	32-10-47
Winning on Court and at Gate	32- 3-20
Emotional Upset in the Athlete	32- 3-16
Dr. Warren R. Johnson	
Epler, Stephen, Six-Man Football in Texas	32- 3-15
Extramural Meet	32- 7-38
Jim Raglin	

F

Facilities and Equipment: Common Errors in Planning	
Facilities	32- 8-46
Fred E. Howell	
Facilities and Equipment: Functional Building for Physical	
Education, Recreation, and Athletics, A	32-10-15
Lyle Bennett	
Facilities and Equipment: Knox College Modern Gymnasium	32- 3-41
Rudy J. Flala, Jr.	
Facilities and Equipment: Make It Yourself	32- 5-10
Andrew W. Grieve	
Facilities and Equipment: Wyoming's War Memorial	
Stadium	32- 2-28
Wiles Hallock	
Flala, Rudy J. Jr., Knox College Modern Gymnasium	32- 3-41
Fischbein, Marty, Quarterback Quizzer	32- 2- 6
Fischbein, Marty, Our Answer to Changing Defenses	32- 9-17
Foley, John, An Offense from the Free Throw Line	32- 3-18
Football: Call and Rule Blocking	32- 2-38
Chink Coleman	
Football: Changing Defenses, Our Answer to	32- 9-17
Marty Fischbein	
Football: Changing Defenses, Use of the Zone System	
to Combat	32- 8-13
Louis F. Zarza	
Football: Cincinnati's Defensive Line Play	32- 2- 9
Sid Gillman	
Football: Coaching Preparatory Schools, Problems in	32- 9-22
John L. Maddox	
Football: Cup Defense, The	32- 2-18
Jay McWilliams	
Football: Defensive Strategy for Junior High Schools	32- 2-24
Norman Geske	
Football: End Play	32- 1- 6
John L. Maddox	
Football: High School Offense	32- 7-28
Football: Maryland's Split T Formation, Backfield Play	32- 1-11
Tommy Mont	
Football: Maryland's Split T Formation, Center Play	32- 1-17
Jack Hennemier	
Football: Maryland's Split T Formation, End Play	32- 1-18
Warren K. Glese	
Football: Maryland's Split T Formation, Line Play	32- 1-15
Denver J. Crawford	
Football: Maryland's Split T Formation, Overall Offense	32- 1- 9
Jim Tatum	
Football: Michigan System from the Balanced Line	32- 9-28
Frank Waters	
Football: Offensive Linemen, Evaluation Chart for	32- 1-52
Sterling Geesman	
Football: Offensive Number System, Psychology of	
Teaching an	32- 7-50
Sam Clagg	
Football: Offensive Number System, Psychology of	
Teaching an	32- 8-34
Sam Clagg	
Football: One Way Football	32- 2-34
Donald Ben Bolt	
Football: Pass Defense for the Junior High School,	
A Simplified	32- 7-19
Norman Geske	
Football: Passing Offense, A Fluid	32- 2-32
Ted Scropos	
Football: Passing Offense in the Junior High School	32- 1-40
Norman Geske	
Football: Pass Patterns, Defense Against	32- 1-32
Chink Coleman	
Football: Quarterback Quizzer	32- 2- 6
Marty Fischbein	
Football: Running Pass, Defending the	32- 1-28
George H. Allen	
Football: Running Pass, Defending the	32- 2-36
George H. Allen	
Football: Single Wing, Speed Up Your	32- 1-34
Alex J. Yunevich	
Football: Six-Man, Foiling the Four-Man Line in	32- 9-16
Donald Grant	
Football: Six-Man Football, 4-Man Offensive Line in	32- 7-62
Ernest L. Nelson	
Football: Six-Man Football in Texas	32- 3-15
Stephen Epler	
Football: Six-Man Optional Spread, The	32- 9-24
Andrew W. Grieve	
Football: Spot Marking to Perfect Timing	32- 9-14
James A. Perry	

Football: Spring Football, Some More on	32- 7-52
Lee S. Vokes	
Football: Starting Times, A Comparison of	32- 1-24
Frank Robinson	
Football: Tackling — 80 Per Cent Heart — 20	
Per Cent Skill	32- 1-36
Joe Merlo and Bob Troppmann	
Football: Wisconsin's Backfield Play	32-10- 8
Robert H. Odell	
Football: Wisconsin's End Play	32-10-13
Paul R. Shaw	
Football: Wisconsin's Line Play	32-10- 9
Milton Brubn	
Football: Wisconsin's T Formation	32-10- 5
Ivan B. Williamson	

G

Gaylord, Curtis, The Basket Is Big	32- 2-50
Geesman, Sterling, Evaluation Chart for Offensive Linemen	32- 1-52
Geske, Norman, Passing Offense in the Junior High School	32- 1-40
Geske, Norman, Defensive Strategy for Junior High Schools	32- 2-24
Geske, Norman, A Simplified Pass Defense for the	
Junior High School	32- 7-19
Giese, Warren K., Maryland's Split T Formation, End Play	32- 1-18
Gillman, Sid, Cincinnati's Defensive Line Play	32- 2- 9
Golf Instruction, Utilizing Your Facilities for	32- 6-36
Richard T. Mackey	
Golf in the Small High School	32- 9-42
Charles E. Anderson	
Golf, The Short Game in	32- 6-28
Frank Stranahan and Jules Platte	
Golf, The Short Game in — Chip Shot, The	32- 8-10
Sam Sneed and Herb Graffis	
Golf, The Short Game in — Explosion Shot, The	32- 7-10
Louis Suggs and Bob MacDonald	
Golf, The Short Game in — Putting	32- 9-12
Lloyd Mangrum and Herb Graffis	
Graffis, Herb, The Short Game in Golf — The Chip Shot	32- 8-10
Graffis, Herb, The Short Game in Golf — Putting	32- 9-12
Grant, Donald, Foiling the Four-Man Line in Six-Man	32- 9-16
Gray, Norman A., Training and Conditioning for	
Competitive Swimming	32- 6-14
Grieve, Andrew W., Indoor Hockey	32- 3-22
Grieve, Andrew W., Make It Yourself	32- 5-10
Grieve, Andrew W., The Six-Man Optional Spread	32- 9-24
Gymnastic Meets, Judging	32- 9-20
Newton Loken and Paul Hunsicker	

H

Hallock, Wiles, Wyoming's War Memorial Stadium	32- 2-28
Hank, Harold, Basketball Drills	32- 2-30
Hennemier, Jack, Maryland's Split T Formation, Center Play	32- 1-17
Henry, Franklin M., Research on Sprint Running	32- 6-30
Hewlett, Joseph M., Fundamental Kicking in Soccer	32- 3-32
Hill, Frank, Sprinting	32- 9- 6
Hockey, Indoor	32- 3-22
Andrew W. Grieve	
Howard, Lou Thom, Conduct of a Wrestling Championship	32- 6-42
Howell, Fred E., The Knee Is a Vulnerable Joint	32- 4-22
Howell, Fred E., Common Errors in Planning Facilities	32- 8-46
Humphrey, Fred, Offense or Defense Responsible?	32- 6-12
Hunsicker, Paul, Judging Gymnastic Meets	32- 9-20

I

Items, New	32- 1-86
Items, New	32- 2-62
Items, New	32- 4-46
Items, New	32- 6-54
Items, New	32- 7-78
Items, New	32- 8-62
Items, New	32-10-42

J

Jameson, D. W., Revolving Offense	32- 4-16
Johnson, Dr. Warren, R., Emotional Upset in the Athlete	32- 3-16

K

Katchmer, George A., The Pressing Sliding Zone	32- 4-33
Kinert, Harry, The Kinert Press	32- 4-14

L

Lacy, E. H., Jr., Co-Ordinating a Track Program	32- 7- 9
Lalley, E. J., Volleyball Techniques	32- 5-15
Lande, Leon, Basketball Trends in North Dakota	32- 4-24
Loken, Newton C., Advanced Stunts on the Parallel Bars	32- 5- 6
Loken, Newton, Judging Gymnastic Meets	32- 9-20
Longcope, Don, End Line Options	32- 3-30
Lyman, Donald F., Exposure for Night Games	32- 2-40

M

MacDonald, Bob, The Short Game in Golf —	
The Explosion Shot	32- 7-10
McWilliams, Jay, The Cup Defense	32- 2-18
McWilliams, Jay, The 2-3 Sliding Zone Defense	32- 5-13
Mackey, Richard T., Utilizing Your Facilities for Golf Instruction	32- 6-36
Maddox, John L., End Play	32- 1- 6
Maddox, John L., Problems in Coaching Preparatory Schools	32- 9-22
Mangrum, Lloyd, The Short Game in Golf — Putting	32- 9-12
Means, Louis E., Sequoia High School — Thirty-One Years of Physical Education Achievement	32- 9-10
Means, Louis E., Sequoia High School—Thirty-One Years of Physical Education Achievement	32-10-28
Merlo, Joe, Tackling — 80 Per Cent Heart — 20 Per Cent Skill	32- 1-36
Miller, Kenneth D., The Small Weight Man	32- 5-16
Miller, Kenneth D., Strategy in the Middle Distances	32- 6-18
Miller, Richard L., A New System of Tennis Stroke Analysis	32- 7-45
Mont, Tommy, Maryland's Split T. Formation, Backfield Play	32- 1-11
Moon, Paul C., We Beat Ourselves	32- 3-36

N

Nelson, Ernest L., 4-Man Offensive Line in Six-Man Football	32- 7-62
Newsom, Heber A., Basketball Fundamentals for the Physical Education Classes	32- 5-12

O

Odell, Robert H., Wisconsin's Backfield Play	32-10- 8
--	----------

P

Parallel Bars, Advanced Stunts on the	32- 5- 6
Perry, James A., Spot Marking to Perfect Timing	32- 9-14
Photography: Exposure for Night Games	32- 2-40
Platte, Jules, The Short Game in Golf	32- 6-28
Plutte, William, Massage Via the Buddy System	32- 2-44

Q

Quiring, Robert, Basketball Organization	32- 2-20
--	----------

R

Raglin, Jim, Extramural Meet	32- 7-38
Rawlinson, Kenneth, Shoulder Injuries Preventive and Corrective	32- 7-15
Rideout, J. Blaine, Shoulder Injuries	32- 1-58
Rideout, J. Blaine, Traction With Heat for Neck Injuries	32- 9-44
Rideout, Wayne, Gearing Up	32- 8-20
Robinson, Frank, A Comparison of Starting Times	32- 1-24
Russell, John "Honey", Seton Hall's Set Offense	32- 3- 7
Ryser, Otto E., Teaching Tumbling and Gymnastics	32- 4-26

S

Scropos, Ted, A Fluid Passing Offense	32- 2-32
Sequoia High School — Thirty-One Years of Physical Education Achievement	32- 9-10
Sequoia High School—Thirty-One Years of Physical Education Achievement	32-10-28
Shaw, Paul R., Wisconsin's End Play	32-10-13
Sipos, John E., Winning Attacks	32- 4-13
Smilgoff, James, Pre-Season Indoor Drills	32- 5-40
Smilgoff, James, Throw the Stealers Out	32- 6-24
Smith, C. Q., Tournament Preparation	32- 5-54
Snead, Sam, Golf, The Short Game in — The Chip Shot	32- 8-10
Soccer, Fundamental Kicking in	32- 3-32
Stranahan, Frank, The Short Game in Golf	32- 6-28
Suggs, Louise, The Short Game in Golf — The Explosion Shot	32- 7-10
Swimming, Training and Conditioning for Competitive	32- 6-14

T

Tatum, Jim, Maryland's Split T Formation, Overall Offense	32- 1- 9
Tennis: Stroke Analysis, A New System of	32- 7-45
Tennis: Unique Type of Championship, A — The Flight System	32- 9-26

Thoreau, H.D., Olympic Prospects	32- 8-22
Thoreau, H.D., Olympic Prospects	32- 9-38
Thoreau, H. D., Olympic Prospects	32-10-32
Track and Field: Cross Country, Training for	32- 1-26

Track and Field: Distance Running, Fartlek and European Superiority in	32- 7-22
--	----------

Track and Field: Fifteen Foot Vault, The	32- 8- 7
--	----------

Track and Field: 440, How to Run the	32- 8-26
--------------------------------------	----------

Track and Field: Gearing Up	32- 8-20
-----------------------------	----------

Track and Field: Middle Distances, Strategy in the	32- 6-18
--	----------

Track and Field: National Honor Roll	32- 5-30
--------------------------------------	----------

Track and Field: Olympic Prospects	32- 8-22
------------------------------------	----------

Track and Field: Olympic Prospects	32- 9-38
------------------------------------	----------

Track and Field: Olympic Prospects	32-10-32
------------------------------------	----------

Track and Field: Relay Racing	32- 6- 6
-------------------------------	----------

Track and Field: Small Weight Man, The	32- 5-16
--	----------

Track and Field: Sprinting	32- 9- 6
----------------------------	----------

Track and Field: Sprint Running, Research on	32- 6-30
--	----------

Track and Field: Survey of Track and Field Facilities	32- 5-20
---	----------

Track and Field: Weight Men, Working With	32- 7-48
---	----------

Track in the High Schools	32- 5-31
---------------------------	----------

Track Meet, High School	32- 5-32
-------------------------	----------

Track Program, Co-Ordinating a	32- 7- 9
--------------------------------	----------

Training: Knee Is a Vulnerable Joint, The	32- 4-22
---	----------

Training: Massage Via the Buddy System	32- 2-44
--	----------

Training: Neck Injuries, Traction With Heat for	32- 9-44
---	----------

Training: Shoulder Injuries	32- 1-58
-----------------------------	----------

Training: Shoulder Injuries Preventive and Corrective	32- 7-15
---	----------

Training: Training Kits Hints About	32- 8-14
-------------------------------------	----------

Triples Balancing, Advanced	32- 8-16
-----------------------------	----------

Triples Balancing, Beginning	32- 6-10
------------------------------	----------

Triples Balancing, Intermediate	32- 7-12
---------------------------------	----------

Troppmann, Bob, Tackling — 80 Per Cent Heart — 20 Per Cent Skill	32- 1-36
--	----------

Trowbridge, William, Guard Play	32- 3-28
---------------------------------	----------

Tumbling and Gymnastics, Teaching	32- 4-26
-----------------------------------	----------

Tuttle, Harris B., Exposure for Night Games	32- 2-40
---	----------

V

Visual Aids in Physical Education	32-10-18
-----------------------------------	----------

Vogel, Otto H., Types of Pitches	32- 7- 6
----------------------------------	----------

Vokes, Lee S., Some More on Spring Football	32- 7-52
---	----------

Volleyball Techniques	32- 5-15
-----------------------	----------

W

Ward, Stan, Applying the Full Court Press	32- 4-20
---	----------

Warmerdam, Cornelius, The Fifteen Foot Vault	32- 8- 7
--	----------

Waters, Frank, Michigan System from the Balanced Line	32- 9-28
---	----------

Wells, Cliff, Tulane's Pivot Continuity	32- 4- 6
---	----------

White, Robert C., Hints About Training Kits	32- 8-14
---	----------

Williamson, Ivan B., Wisconsin's T Formation	32-10- 5
--	----------

Wrestling Championship, Conduct of a	32- 6-42
--------------------------------------	----------

Y

Yunevich, Alex J., Speed Up Your Single Wing	32- 1-34
--	----------

Z

Zarza, Louis F., Use of the Zone System to Combat Changing Defenses	32- 8-13
---	----------

Visual Aids in Athletics

THERE is no question about the value of visual aids in education. The value of visual aids in teaching became a certainty after the success the armed forces had with them during World War II. Since that time visual aids have become a very integral part of education.

Athletics being a part of education, the use of visual aids should be considered. Athletics being based on form and techniques lends itself especially well to the use of visual aids. For this reason we called upon Colonel Bank to discuss the use of visual aids in relation to both physical education and athletics. His article appears elsewhere in this issue and we invite special attention to it.

In the meantime, we of the Athletic Journal are going right ahead with our belief that through the use of pictures the coaching and teaching of athletic skills is made easier. In fact, we believe so strongly in this that we have increased the number of pictures from 732 last year to 850 this year—an increase of 16 per cent. We feel that more and more use will be made of visual aids in athletics; and consequently, this is justification for the greater number of pictures we carried. We cannot, however, help but note that we are apparently alone in this, for there is another publication in the field which is carrying less pictures today than it did three years ago.

Our journeys for the progressive action pictures which appeared in this year's issues have taken us on a tour of about half of the country, visiting as we have College Park, Maryland; Cincinnati, Ohio; South Orange, New Jersey; New Orleans, Louisiana; Ann Arbor, Michigan; Des Moines, Iowa; Milwaukee, Wisconsin; Evanston, Illinois; and Madison, Wisconsin. The travel involved in covering the majority of these places is not only expensive, but it is also time-consuming. However, we feel that if we are to be a national publication in our circulation and reading matter, then we must be a national publication in our pictures as well. It is our firm intent to add other states to those covered this year and last year, with the ultimate view to eventually covering all the sections of the country.

We have been asked if it might not be possible to put the pictures on only one side of the sheet, so that they might be used for bulletin boards. Unfortunately, this is impossible because of the mechanical difficulties encountered, such as length of articles, etc. However, we are always happy to send out a set of tear sheets, and will do so if the request is made and an addressed stamped envelope is enclosed.

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 O. C. Mfg. Co., 42, ☐ Information
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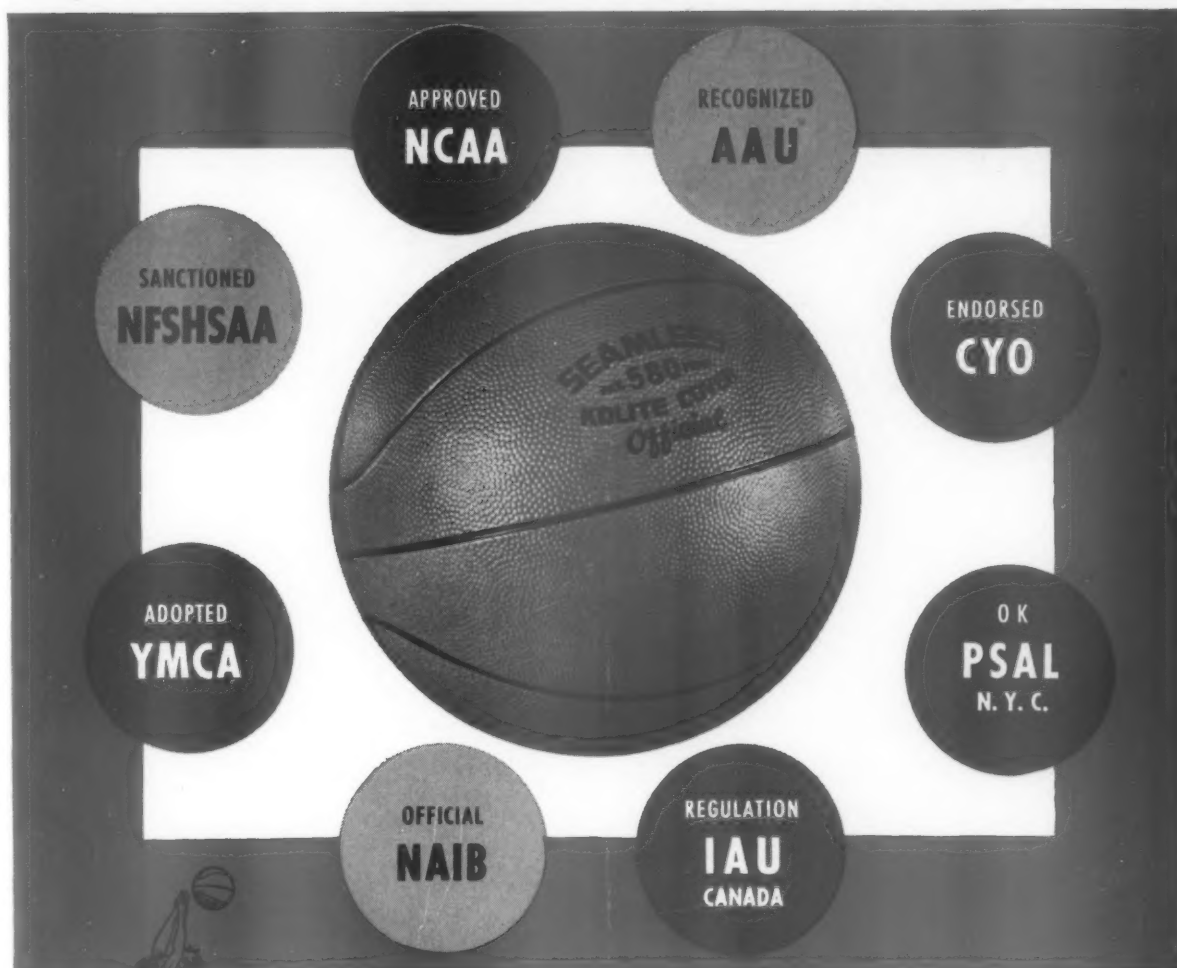
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INDEX TO ADVERTISERS

Bemel & Assoc., David	4
Bike Web Mfg. Co.	27
Crouse-Hinds Co.	21
Griswold, Larry	40
H. & R. Mfg. Co.	37
Hillyard Sales Co.	29
Horn Bros. Co.	17
Hussey Mfg. Co.	31
Indiana Basketball Coaching School	41
Ivory System	Cover 4
Kahn Co., Arthur	31
Leavitt Bleacher Co.	39
McArthur & Sons, George	41
MacGregor Goldsmith, Inc.	23
Naden & Sons	40
National Sports Equipment Co.	37
New York State Coaching School	38
Nissen Trampoline Co.	36
Nurre Companies, Inc.	3
Perfo Mat & Rubber Co., Inc.	40
Rawlings Mfg. Co.	Cover 2
Riddell Inc., John T.	19
Sand Knitting Mills	39
Scott & Sons Co., O. M.	33, 38
Seamless Rubber Co.	Cover 3
Sidlinger Products	42
Soilaire Industries	33
Spalding & Bros., Inc., A. G.	1
Texas High School Coaches Assn. Coaching School	41
Universal Bleacher Co.	35
West Point Lawn Products	37



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We feel, however, that today's high-priced equipment deserves more than mere patch-work repairing and haphazard protection.

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other things, you buy millions of dollars in insurance against loss from any cause. It is a false idea of economy to gamble thousands of dollars worth of equipment to save pennies.



"IN A CLASS BY ITSELF"

Ivory System

PEABODY, MASSACHUSETTS

RECONDITIONERS
OF ATHLETIC
EQUIPMENT

